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SEE PAGE 51 FOR ALPHABETICAL INDEX

SEE PAGE 52 FOR CLASSIFIED INDEX

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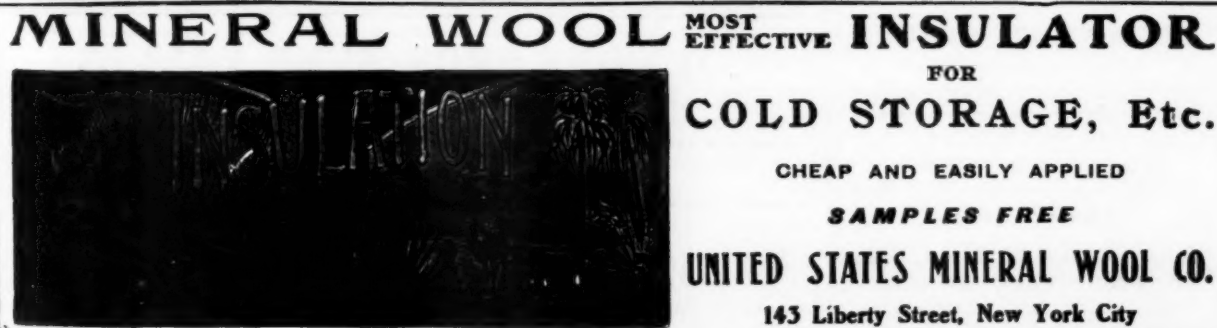
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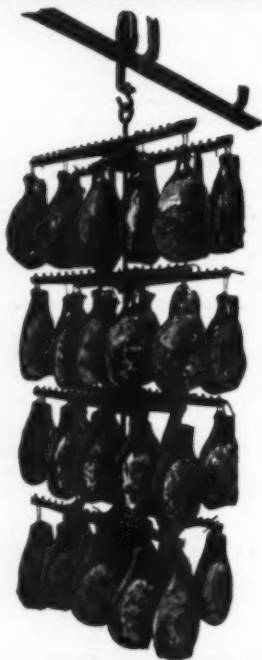
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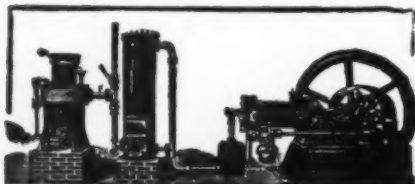


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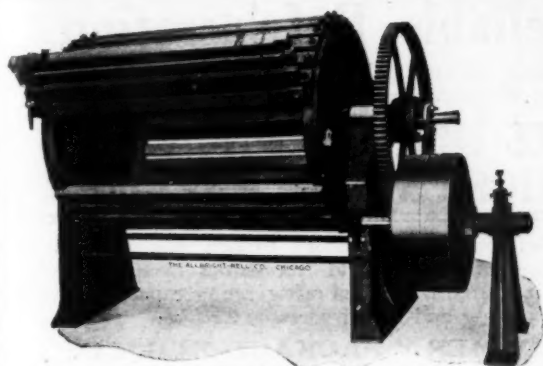
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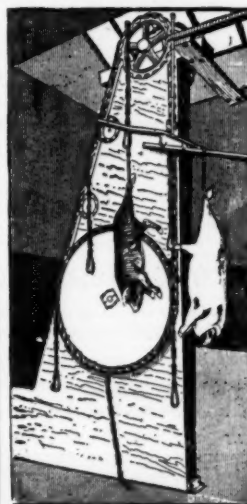
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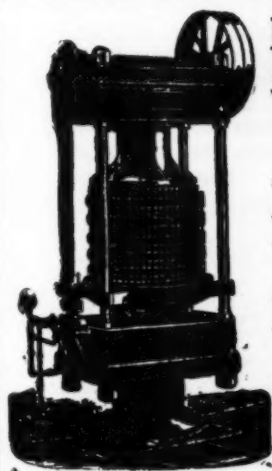
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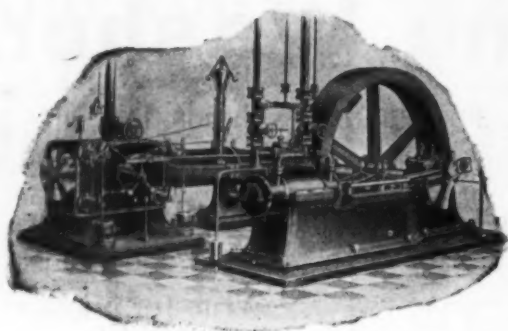
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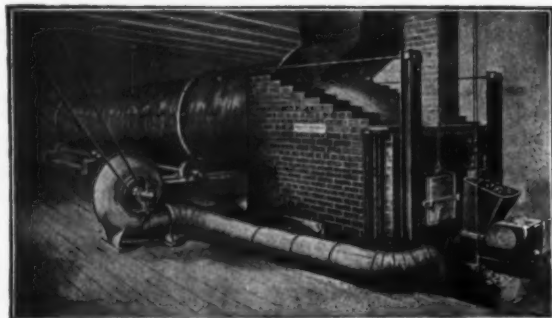
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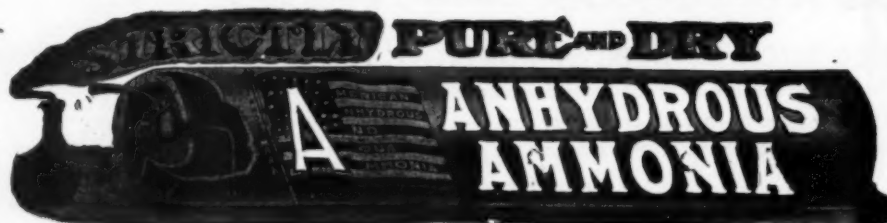
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THE NATIONAL PROVISIONER

PUBLISHED EVERY SATURDAY

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ENTERED AT NEW YORK AT SECOND-CLASS RATES.

Vol. XXXIII.

New York and Chicago, November 25, 1905.

No. 22.

MELVIN HEADS ANIMAL BUREAU.

The long-deferred appointment of a successor to Dr. D. E. Salmon as chief of the Bureau of Animal Industry of the Department of Agriculture was announced this week. Secretary Wilson made it known that he had promoted the assistant chief of the bureau, Dr. A. D. Melvin, to the place. Dr. Melvin had the backing of livestock interests all over the country, and their influence is believed to have had a good deal to do with the appointment, though it could have been made strictly on merit.

Dr. Melvin has been connected with the department since 1886 and is an authority on livestock subjects. His direction of the federal meat inspection service is one of the phases of his work which will be of special interest to the trade, especially at this time, when an effort is being made to secure an additional appropriation for the use of his bureau in this direction.

DECREE AGAINST CONSOLIDATED.

A final decree for \$3,319,198 has been entered in the Chicago courts against the Consolidated Packing Company, the defunct Stock Yards concern, in favor of the Illinois Trust & Savings Bank, which held the company's securities as trustee. The litigation is based on foreclosure proceedings brought by holders of bonds in the Consolidated corporation, which went into the hands of a receiver three years ago. The assets consisted of buildings at the Stock Yards which sold for \$600,000. This left a deficiency of \$3,319,198, for which decree was entered.

CHRISTMAS BEEF FOR ENGLAND.

Leading packers and exporters are doing a lively business in prime beefs for the British holiday trade. The demand is said to be much heavier this year. The British consumers are learning that the choicest Christmas beef comes from the United States, and the feed lots of the middle states have been culled of the best of their prime cattle to supply the foreign call. There will be no lack of prime Christmas beef from America in British markets next month.

DEATH OF VETERAN PORK PACKER.

George Bayha, who established the G. & C. Pork Packing Company in St. Louis in 1848, died last week in that city at the age of 83 years. His concern was at one time the largest in St. Louis.

THE CHANCES FOR RECIPROCITY.

The State Department at Washington is taking more than a mild interest in the question of negotiating a new reciprocal trade treaty with Germany to replace that which expires by German denouncement on the first of next March. While the President is absorbed in his railroad rate campaign, Secretary of State Root is doing what he can to find out what likelihood there is of getting Congress to favor reciprocity arrangement with Germany. The German ambassador having presented his government's views, it is "up to" Mr. Root to maintain the reputation of his department by negotiating a new treaty.

Not desiring to repeat the experience of the late Secretary Hay, who saw his reciprocity treaties ignominiously "turned down" by the Senate "stand-patters," Mr. Root is said to be "sounding his Congressional callers daily to learn their views respecting the possibility of securing approval for a new commercial treaty." He will not send such a treaty to the Senate unless he feels that it stands a chance of ratification. In the meantime Secretary Root and the German ambassador are said to be proceeding leisurely and amicably with the discussion of the terms of the proposed treaty.

FERTILIZER MARKET ACTIVE.

The fertilizer market has taken on a tone of more activity recently. Large sales of blood were reported as having been made by Chicago packers last week for prompt delivery, some 2,000 tons having been included in the orders referred to. The market became strong and showed a higher tendency as a result of the increased demand. Packing-house fertilizer materials are constantly growing in favor of the world over, and a notable feature of the export trade of recent months has been the shipment of concentrated tankage to far-distant foreign ports. Japan is becoming a good market for American fertilizer materials, and other countries are following suit.

SWISS TARIFF INCREASE.

Switzerland's new customs tariff goes into effect January 1, 1906, carrying with it a general increase in duties. Though the United States is given the benefit of the "most favored nation" clause, yet the tariff makes several increases on American products, notably salt smoked meats and bacon, which are increased \$1.60 to \$2.80.

PACKERS WIN MONTANA SUIT.

The Supreme Court of the state of Montana on Saturday handed down a decision declaring the so-called anti-trust law of that state to be unconstitutional. For over a year the attorney-general of the state has been endeavoring to prosecute various packers for alleged conspiracy to control the meat trade of Montana. The cases never came to trial, for the lower court declared the law invalid. Now the Supreme Court has sustained that decision.

This effectually disposes of attempts made by the attorney general to prosecute several big packers for alleged conspiracy to control prices of cattle and meats in Montana. Criminal proceedings were brought before District Judge Henry C. Smith in Helena. Counsel for the packers demurred to the information setting up that the law was unconstitutional, in that it excepted agricultural and horticultural classes; in other words, it was class legislation, thereby violating the constitution. Judge Smith sustained the demurrer and the state appealed, with the result that the Supreme Court upheld Judge Smith.

The decision of the Montana Supreme Court follows the ruling of the Supreme Court of the United States, which declared unconstitutional for similar reasons the anti-trust law of Illinois, which excepted agriculturists and raisers of livestock. "The intention of any legislation must be inferred in the first place from the plain meaning of the words used," says the Montana court. "If this intention can be so arrived at, the courts may not go further than apply other means of interpretation. It is only where there is doubt as to the intention that other rules may be applied. This statute is clear and certain as to its intention, and that intention as expressed is to except from the operation of the law persons engaged in agriculture and horticulture. The judgment of the district court is correct and is affirmed."

It is expected that a bill will be introduced in the next legislature to cure the defect in the law.

A NEW COTTON OIL RULE.

A substitute for rule 9 of the rules regulating transactions in cottonseed products among members of the New York Produce Exchange has been adopted and will be in force Nov. 26, and which provides, essentially, for a more satisfactory handling of transfer notices.

COMMERCE COMMISSION CANNOT CHANGE RATES

In the United States Circuit Court at Chicago on Monday Judge Bethea handed down a decision declaring that the Interstate Commerce Commission could not order Western railroads to reduce their freight rates on livestock between the Missouri River and Chicago to the same basis as their charges on dressed meat between those points. The commission's order to eighteen roads to reduce rates, which these roads have declined to obey, will therefore have to be withdrawn, unless higher courts reverse the decision.

The ruling was another blow at the authority of the commission. Judge Bethea decided that the commission's decree was not binding on the roads; that it had not the power to compel the enforcement of its decisions. He further declared that there was no evidence of collusion on the part of the roads, and that the livestock rates were not a discrimination, as compared with the dressed meat charges. In addition to nullifying the commission's ruling, he refused its application for an injunction against the railroads to prohibit them from refusing to lower the rates.

The Interstate Commerce Commission held extended hearings on the subject of livestock and packinghouse products rates between Missouri River points and Chicago. Last January the commission ruled that the livestock rates were unjust, and should be reduced to a level with the rates charged for dressed products. The roads refused to obey the decree, and the commission brought suit in the federal court to enforce its order. Much testimony was taken, and various stock yards and commission interests at the Missouri River markets intervened in the suit in opposition to the ruling of the commission, while Chicago commission interests supported the action.

In the complaint it was alleged "that the defendants were common carriers from the Missouri river and St. Paul to Chicago; that before August 8, 1902, the published rates of the defendants as to fresh meats and packinghouse products from the Missouri river and St. Paul to Chicago were the same as were the rates on live cattle and hogs from the same points to Chicago; that upon the mentioned date the defendant, the Chicago Great Western Railway company, made a contract with certain owners of packinghouses in Kansas City, St. Joe and other Missouri river points in consideration of re-

ceiving a certain percentage of their business for seven years that for that period the said railway company would transport from the Missouri river points and St. Paul to Chicago fresh meats and packinghouse products at certain rates.

"And they further charge that such condition of rates had existed from that time until the filing of these petitions; that said rates were unreasonable under section 1 of the interstate commerce act and the result of such condition of rates was that under section 3 of the act and of the Elkins act the defendants are committing an unlawful discrimination against said live cattle and live hogs, the shippers thereof and the locality of Chicago, and thereby giving an undue and unreasonable preference or advantage to the traffic of fresh meats and packinghouse products over said live cattle and hogs."

In his decision Judge Bethea announced these findings of fact:

Points in the Decision.

That the livestock rates are reasonable in themselves.

That the cost of carrying livestock is greater to the packers because of the higher price of a car of dressed meats, valued worth twice that of livestock.

Rates were not made voluntarily, but from necessity arising from competition, the necessity being that of carrying the goods at the lower rate or losing the business.

That the competition in question did not result from agreement of the defendant, but was actual, genuine competition.

That the welfare of the public, including the shippers, consumers and all localities and markets, does not seem to be materially affected by the present rate.

"It appears, then, under the facts," concludes the court, "that the reduction of rates was not voluntary, according to the definition and description thereof in some of the cases, but was caused on the part of the Chicago Great Western Railway company by the necessity of competing for business which under the law they were required to do. The evidence shows that in substantially all cases the factor of competition alone controls the rate."

Interests favoring railroad rate regulation will make this decision an argument in their campaign in Congress to give the Interstate Commerce Commission greater powers in enforcing its rulings.

BRITISH MEAT IMPORTS.

Official statistics of the imports of fresh meats and provisions into Great Britain from various countries during the first ten months of 1905 show that Argentina furnished 2,082,084 cwt. of beef, against 1,846,221 cwt. from the United States. The balance of the supply was divided between New Zealand with 132,684 cwts., Australia with 5,078 cwts. and other countries 58,607 cwts. Pork was imported to the amount of 383,881 cwts., of which the United States provided 96,014 cwts., against 245,444 cwts. of Dutch pork and the balance from Belgium and scattered countries. The bacon total was 4,631,206 cwts., the United States leading with 2,268,992 cwts., against 1,245,737 cwts. from Denmark and 1,045,769 cwts. from Canada. New

Zealand and Argentina each sent nearly a million and a half cwts. of frozen mutton out of a total of 3,217,997 cwts. imported. Total values of livestock and meat imports for the period, as compared with the first ten months of 1904, were as follows:

	1905.	1904.
Cattle	£8,019,744	£8,202,996
Sheep	261,777	475,564
Beef	7,289,205	6,814,138
Mutton	6,273,100	5,912,892
Pork	886,105	1,053,197
Bacon	10,657,028	10,666,100
Total	£33,387,259	£33,124,887

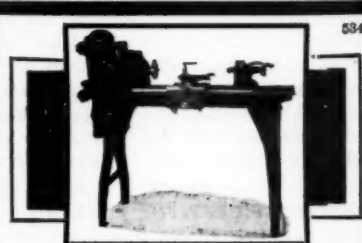
Openings for experts in all departments of the packinghouse industry. Watch page 48.

FIXING FOOD STANDARDS.

Sessions of the national food standards committee, composed of government and state food commissioners and chemists, were held in Boston this week, and are still continuing. At the present meeting it is expected that tentative standards for fruit products, flavoring extracts, etc., will be finally revised and adopted. Hearings will be held as to standards for meat products, egg products, gelatine, ice cream, bakers' products, tea and coffee, fruit-juices, spirituous and malt liquors, mineral waters, etc. The members of the commission are Professor William Frear, president of the commission and assistant director of the state agricultural station of Pennsylvania; Dr. Harvey W. Wiley, chief of the bureau of chemistry of the United States Department of Agriculture; Professor M. A. Scoville, of the Kentucky food bureau, Lexington, Ky.; Professor H. G. Webber, of the Ohio State University, Columbus, Ohio, and D. E. Jenkins, of New Haven, director of the Connecticut agricultural station.

MEAT INSPECTION IN GERMANY.

Writing about meat inspection in Prussia, Consul-General Guenther, of Frankfort, Germany, declares that according to official statistics 81,312 horses, 299,050 oxen, 272,645 bulls, 919,445 cows, 372,388 heifers (over 3 months old), 2,195,272 calves, 8,852,816 hogs, 1,523,732 sheep, 158,340 goats and 1,177 dogs were slaughtered and inspected during the year 1904 in the Kingdom of Prussia. Of these, 13,683 cows were rejected entirely; of 284, all but the tallow was rejected; of 368,203, some parts were rejected; 4,426 were conditionally fit; the value of 21,832 was considerably reduced for food purposes. With hogs the lights of 509,839 and the livers of 180,454 were rejected; of 796,854 some parts were rejected, and 8,896 entirely. These figures show that the home supply of animals is subject to diseases, and it also shows the importance of proper inspection of animals slaughtered for human consumption.



YOUR MACHINE SHOP CAN DO MORE AND QUICKER WORK

by using motor-driven machines; make each a compact, self-contained unit, capable of working fast, yet with wide range of speeds under control of machine hand.

We show a Northern Single Voltage Variable Speed Motor driving a Star Lathe.

BULLETIN NO. 2,377A.

Northern Electrical Mfg. Co.
ENGINEERS—MANUFACTURERS,
MADISON, WIS., U. S. A.

BLACKMAIL IN PACKERS' CASES

Former Armour Employee Arrested on Charge of Attempting to Extort Large Sum of Money as Price for Withholding from Government Copies of Letters Which He Had Stolen from Office Files Before Leaving Company's Employ.

What is alleged to be an attempt to blackmail one of the packers now under indictment by the government under the so-called anti-trust laws was revealed on Saturday by the arrest of two men in a Chicago hotel while they were endeavoring to get a large sum of money from an attorney representing the packer in question. One of the men was a discharged stenographer; the other was his brother-in-law. Both were put under bonds for trial on charges of blackmail and attempted extortion.

When it first became known that the government intended to prosecute the packers criminally, several offers were made to government attorneys by former employees of various packers to furnish evidence substantiating the government's charges of collusion to restrain trade. During the newspaper agitation of the subject these employees, usually stenographers engaged in the offices of high officials of the concerns, quietly copied from the letter files and other records matters which they thought they might give to the government for a consideration.

One employee, a woman with "literary" aspirations, defended this sort of purloining with the excuse that she wanted to write a book on the packinghouse business and the methods of the great packers. Another employee turned over what he had taken to government agents, and soon thereafter was given a position as a member of the federal secret service. The blackmail plan was not tried, apparently, until after the grand jury had returned its indictments.

In July a stenographer named William S. McSwain resigned his position in the Chicago offices of Armour & Company, where for four years he had had access to the correspondence and business records of the company. It is charged that when he left he took with him copies of letters which he had abstracted from the office files. This fact is said to have developed about a month ago, when McSwain called on J. Ogden Armour at his Chicago offices and demanded \$40,000 to return the letters.

Trap Laid for Blackmailer.

He was ordered out of the office. It is said he tried other officers of the company with his proposition, but met with the same reception. He tried to make them think the correspondence which he had stolen was of great value to the government in the prosecution of the pending cases, but they could not see it that way. He became so persistent that a trap was finally laid for him by attorney Rosenthal. He met the lawyer at a hotel and repeated his offer. The attorney pretended to accept it, and money was passed. The entire conversation was overheard by officers in the next room.

At the proper time the officers were called in and McSwain was arrested, as was his brother-in-law, Wilbur Cole, who was with him. Both went to jail in default of bond, and were this week bound over for trial. Attorney Rosenthal made this statement after the arrest:

"McSwain turned twenty letters over to me and signed a full statement regarding

his thefts and his attempts at blackmail when I showed him a roll of \$10,000 in bills, which he believed I was about to pay. McSwain signed it voluntarily, in my rooms, with the understanding that it would be used to safeguard Mr. Armour against any future attempts to extort more than the \$15,000 promised him. He agreed to take \$10,000 in cash, to have \$5,000 placed in escrow for payment to him within a year and to leave the United States for Japan at once. McSwain will be prosecuted for the theft of the mail as well as for conspiracy to extort. Cole will be prosecuted merely for conspiracy."

Representatives of the packers say the correspondence, which was of a business nature, contains nothing of value in connection with the pending case. Government agents are said to have shown a frantic desire to get hold of it. Failing to do so, the government attorneys are quoted as being of the opinion that the whole affair is a "put-up job." Up to last reports they had not gone to Washington "to consult Attorney General Moody" about it.

The government was this week expecting to file in court its reply to the packers' latest attack on the indictments against them, which alleged that they could not be prosecuted on evidence which they had themselves voluntarily furnished to Commissioner Garfield during his investigation of the beef industry. Attorney General Moody took the very unusual step of issuing a statement to the public concerning the government's position in the matter. He denied that Mr. Garfield made any promises of immunity, or that any evidence obtained by him was used in the grand jury hearing.

AN ORDER FROM NEW ZEALAND.

The meat trade all over the world looks to America for the latest in labor-saving and money-making machinery, appliances and methods, and is ready to buy of us when it knows we have something good to sell. That the National Provisioner is read all over the world, and that it is looked upon everywhere as the authority on American packinghouse and allied affairs, was again demonstrated last week in an order received by an American packinghouse machinery firm from the other side of the globe. In a letter to The National Provisioner the Allbright-Nell Company of Chicago says: "We have just received an export order for a Cuning ham-tying and loin-rolling machine to go to Wellington, New Zealand. This order we can credit to your paper, as it came from a notice of this machine that you published some months ago."

Other firms have had the same experience. They find that it pays to make known the merits of their products through the columns of the recognized authority in the trades to which they appeal, which brings results even from the remotest countries.

He said the Department of Justice had obtained all its own evidence. This was in the face of the fact that a very important part of Commissioner Garfield's report has never been made public, but was withheld by the President for use in the prosecution of the packers' cases. He also denied that some of this evidence was stolen, and some of it obtained by forcible seizure. In concluding his statement Mr. Moody says:

"After full conference with Mr. Garfield the answer of the government has been prepared under the supervision of the Attorney General and with the assistance of the District Attorney, and will be filed in court. The government admits the facts, but contends that they constitute no bar to a criminal prosecution. The answer prepared by the government will raise a mixed issue of law and fact, to be determined by the court in which the proceedings are pending. A speedy trial will be urged."

PITTSBURG'S FAT STOCK SHOW.

The promoters of the Pittsburg Fat Stock Show, which is to be held at the Pittsburg Stock Yards from December 9 to 11, have issued the list of premiums to be awarded for the different classes. They are an attractive lot, and include the following:

Cattle, best loads, any breed, \$100, \$75, \$50. Hogs, best double deck, \$50; second best double deck, \$30; best single deck, \$25; second best single deck, \$15. Lambs, best double deck, \$50; best single deck, \$25. Sheep, best single deck, \$25; second best single deck, \$15. Bulls, best bull, \$15; second best bull, \$5. Heifers, best heifer, \$15; second best heifer, \$10.

In addition to these prizes there will be offered the "Schenley Hotel" silver loving cup for the best individual Shorthorn steer, the "Fort Pitt Hotel" silver loving cup for the best individual "Hereford" steer, and twenty dollars in gold for the best individual Angus steer. The following well known gentlemen are named as the judges of cattle and are considered among the best in the country: Richard Webber, Benjamin Naus, of Naus Bros. Company, and Mayer Meyer, vice-president of the New York Butchers' Dressed Meat Company, all of New York City, and George Roesch, of Charles Roesch & Sons; Louis Reining, of McCandless, Reining & Company, and Harry A. Herbott, of Philadelphia, Pa.

CINCINNATI CENTRAL PACKING PLANT.

Abattoir and meat men in Cincinnati who are members of the Cincinnati Slaughterers' Association are again considering the plan for a sort of co-operative packinghouse plant to take care of the by-products of their slaughtering operations, which they have not heretofore been able to dispose of to the best advantage. The Cincinnati Abattoir Company and the Roth Packing Company are at present the only concerns in that locality which are equipped for saving and handling by-products. Newspaper reports tell of a plan for a \$2,000,000 plant, it having been figured that the saving in offal at the various local plants would be sufficient to guarantee a 5 per cent. dividend on such a capitalization. It is not likely that the project will take immediate form, however.

EQUIPMENT OF A PACKINGHOUSE

Complete List of the Machinery, Supplies, Tools and Other Equipment of Every Department of a Modern Packinghouse, Compiled for the Information of Owners, Builders, Superintendents, Engineers and Manufacturers of Packinghouse Equipment.

(Continued from last week.)

Owing to many inquiries received upon the subject, The National Provisioner has prepared a complete list of the departments in a modern packinghouse and the machinery, supplies, tools and other equipment used in each. Anything even approaching it has never before been attempted, and its preparation has been a work of many months.

It should be valuable to present owners of packinghouses who may wish to ascertain if their equipment is complete, or who contemplate additional departments. It will be especially interesting for builders of prospective plants, as it may be used as a basis for estimating cost. It will be an aid to packinghouse architects and engineers, who, despite their knowledge of the business, cannot have all of the details either in their minds or readily accessible.

(Departments which have already appeared include Power Plant, Cattle, Hog and Sheep Killing Departments, Cutting Department, Meat Market Department, Sausage Department, Tripe and Feet Department, Refrigerating Department, Curing Department, Smoking Department, Canvassing, Bag and Clothing Department, Tank Room, Refinery, Neutral Lard Department, Oleo Department, Fertilizer Department, Bone Department, Guts and Casings Department, Bristles, Hair and Cattle Switches Department, Canning, Chipped Beef and Extracts Department, Packing Department, Repair Departments, Special By-Product Departments, including Soap, Washing Powders, etc., Mince Meat and Plum Pudding, Ammonia; Glue, Gelatine, etc., Isinglass, Sandpaper; Livestock and Poultry Foods; Blood, Bones, Horns, Hoofs; Paint; Bristles, Hair, Switches, etc.)

FELT.

*Power (system).
*Light (system).
*Fire (system).
*Water (system).
*Steam (system).
*Elevators.
*Conveyors.
Scales.
*Pumps.
Ventilators.
*Agitators.
*Presses for Baling.

Equipment.

Telephones.
Lockers.
Shafting.
Belting.
Tracking.
Pipes.
Valves.
Fittings.
Vats.
Steam Coils.

Supplies.

Salt.
Lime.
Lubricating Oils.
Burlap.
Barrels.
Sacks.
Twine.

Tools.

Hatchets.
Barrows.

Trucks.
Brooms.
Forks.
Rakes.
Scoops.
Small Tools, Etc.

*Power required.

STRAWBOARD AND WRAPPING PAPER.

Machinery.

*Power (system).
*Light (system).
*Fire (system).
*Water (system).
*Steam (system).
*Elevators.
*Conveyors.
Scales.
*Pumps.
Ventilators.
*Agitators.
*Presses for Baling.
Rollers.

Equipment.

Telephones.
Lockers.
Shafting.
Belting.
Tracking.
Pipes.
Valves.
Fittings.
Vats.
Steam Coils.
*Boiling Vats.

Supplies.

Salt.
Lime.
Lubricating Oils.
Burlap.
Barrels.
Sacks.
Twine.

Tools.

Hatchets.
Barrows.
Trucks.
Brooms.
Scoops.
Small Tools, Etc.

*Power required.

LABORATORY.

(Analysis, Digestive Ferments, Etc.)

General Equipment.

Cold Water Line.
Gas Line.
*Compressed Air.
*Steam Heating.
*Electric Lighting.
*Electric Furnace.
*Electric Motor.
*Steam Bath.
*Hot Air Bath.
Ventilating Hood.
*Refrigerating Device.

General Appliances.

Analytical Balances.
Scales.
Metric Weights.
Dishes.
Beakers.
Graduates.
Crucibles.
Grinding Mill.
Crusher.
Supports.
Triangles.
Pipettes.
Burettes.
Erlenmeyer Flasks.

Gas Burners.
Funnels.
Burette Holder.
Desiccators.
Wash Bottles.
Filter Pump.
Thermometers, Common, deg. F.
Thermometers, in 1-5 and 1-10 deg. C.
Glass-stoppered Cylinders.
Glass-stoppered Cylinders, Graduated.
Kjeldahl Flasks.
Mortars.
Bulb Tubes.
Rubber Stoppers.
Rubber Stoppers, Perforated.
Liebig Condenser.
Rubber Tubing.
Glass Tubing.
Stirring Rods.
Drying Ovens.
Soxhlet Apparatus.
Test Tubes.

Chemicals.

Aqua Distillata.
Ethyl Alcohol.
Amyl Alcohol.
Wood Alcohol.
Gasoline, 87 deg.
Ether, Sulphuric.
Petrol Ether.
Sulphuric Acid.
Hydrochloric Acid.
Nitric Acid.
Acetic Acid.
Caustic Potash.
Caustic Sodium.
Ammonia.
Phenolphthalein.
Cochineal Tincture.
Granulated Zinc.
Mercury.
Mercuric Oxide.
Potassium Sulphide.
Potassium Permanganate.
Paraffine.
Carbon Disulphide.
Sulphur.
Ammonium Nitrate.
Ammonium Molybdate.
Molybdic Acid.

*Power required.

BUTTER, BUTTERINE AND OLEOMARGARINE.

Machinery and Equipment.

*Power (system).
*Light (system).
*Fire (system).
*Water (system).
*Steam (system).
*Elevators.
*Conveyors.
*Motors.
*Refrigerating and Ice Making Machinery.
Scales.
*Pumps.
*Blowers.
*Fans.
Ventilators.
*Churns.
*Butter Workers.
*Salt Crushers.
Print Machines.
Telephones.
Lockers.
Shafting.
Belting.
Pulleys.
Hangers.
Rail.
Switches.
Piping.
Valves.
Fittings.
Exhaust Heads.
Tables.
Steam Coils.
Melting Kettles.
*Agitators.
Milk Vats.
Cream Separators.
Milk and Cream Testers.
Crystallizing Tanks.

(Continued on page 30.)

TRADE GLEANINGS

A new building is being erected by the Henning Sausage Company at Saginaw, Mich.

L. L. Stern, of Norfolk, Va., will install a new plant for the manufacture of German sausages.

The Southern Cotton Oil Company, of Fayetteville, N. C., will erect a fertilizer factory it is reported.

The De Queen Light, Ice & Cold Storage Company will erect a large cottonseed storage house at Little Rock, Ark.

The stockholders of the Procter & Gamble Company have voted to increase the capital stock from \$6,000,000 to \$9,000,000.

The Buckeye Oil Company, of Cincinnati, O., contemplates the erection of an oil refinery and soap factory at Selma, Ala.

The soap factory of W. Flarelle & Company, at Wannamassa, N. J., suffered a fire loss on November 15 amounting to \$5,000.

The soap plant occupied by the Standard Soap Company at Boston, Mass., was damaged by fire last week to the extent of \$5,000.

The Eagle Tanning Works, of Illinois and Michigan, with an office at Whitehall, Mich., has been incorporated with a capital stock of \$600,000.

The Virginia Packing Company, of Richmond, Va., will rebuild at once its plant which was burned on November 9, causing a loss of \$200,000.

The Victor Live Stock Company, of Victor, Col., has been incorporated with a capital stock of \$50,000 by J. J. Garvin, Harry Hendrie and J. B. Cunningham.

The Central Leather Company has declared a regular quarterly dividend of 1½ per cent. on the preferred stock, payable Jan. 2, to stockholders of record of Dec. 12.

The United States Leather Company has declared its regular quarterly dividend of 1½ per cent. on the preferred stock, payable Jan. 2 to stock of record Dec. 12.

A soap factory, owned by several Chinamen, and situated at Fourth avenue and East Tenth street, Oakland, Cal., was destroyed by fire recently with a loss of \$1,500.

The management of the Highland Park Ginnery & Oil Mill, of Rock Hill, S. C., will increase the capacity of both its ginnery and oil mill. For information address the manager.

The tannery of the Michigan Leather Company, of Grand Rapids, Mich., was destroyed by fire on November 21, causing a loss estimated at \$100,000, which is covered by insurance.

The Sullivan Beef Company, of Detroit, Mich., is erecting a two-story brick building on Beecher street, to be used as a packing house. The cost will be in the neighborhood of \$25,000.

The Grovania Fertilizer & Oil Company of Grovania, Ga., which has just completed its cottonseed oil mill, will commence the erection of a fertilizer factory. L. A. Shepard is manager.

The Omaha Robe & Tanning Company, of Omaha, Neb., will install new machinery in the building known as the Boyd packing house. It will do a tanning and manufacturing business.

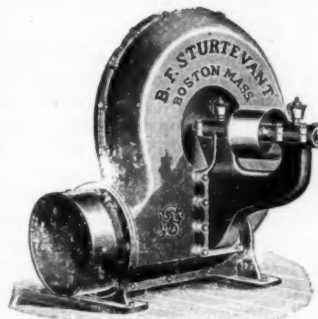
The Indiana Leather Company, of New Albany, Ind., with a capital of \$25,000, has been incorporated by George, John M. and Charles E. Moser. The company will erect a large tannery on Silver street.

The Royal Soap Company, of Cincinnati, Ohio, will establish new headquarters in Kansas City, Mo., for the company's business in Missouri, Kansas, Nebraska and Oklahoma. H. J. Lease will be in charge.

J. Y. Cannon, A. A. Cox, J. E. Bowen, A. P. Coles and T. M. Wings have incorporated the Delaware Cattle Company, of El Paso, Tex., with a capital stock of \$85,000, for the purpose of buying and selling live stock.

The Madison Fertilizer Company, of Madison, Ga., has been organized to operate a fertilizer factory, by W. W. Baldwin, J. E. Godfrey, G. W. Holmes, E. H. George, P. W. Walton, H. H. Fitzpatrick and others.

Like the Painter



who mixed his paint with brains, we build a good blower and then spare neither time or engineering experience in so applying it as to give the very best results.

B. F. STURTEVANT CO., Boston, Mass.

General Office and Works, Hyde Park, Mass.

New York

Philadelphia

Chicago

London

Designers and Builders of Heating, Ventilating, Drying and Mechanical Draft Apparatus; Fans, Blowers and Exhausters; Steam Engines, Electric Motors and Generating Sets; Fuel Economizers; Forges, Exhaust Heads, Steam Traps, Etc.

510

A large cottonseed mill, owned by local capitalists at Eufaula, I. T., was destroyed by fire on Nov. 19. The plant, which was built at a cost of \$75,000, is a total ruin and only partially covered by insurance. F. Y. Goldborough was manager.

The Campbell-Hopkins Company, of Columbus, O., has been incorporated for the purpose of manufacturing soap, polishers and soap machinery, by Joseph D. Campbell, R. C. Kyle, Lizzie C. Kyle, Edmund S. Dunham and R. C. Scott. The capital stock is \$50,000.

The Henry Roeber Company, of Chester, Pa., manufacturers of soap and glycerine, has been declared an involuntary bankrupt. The liabilities are upward of \$300,000, including bonds of \$150,000, and the assets are about \$200,000, including real estate and plant at Chester.

The Mohawk Packing Company of Canajoharie, N. Y., has been incorporated to build abattoir and cold-storage building and prepare animal food for market, with a capital stock of \$10,000. The incorporators are Bartlett Arkell of Canajoharie, and Daniel E. Wing and Ralph P. Buell of New York City.

GALLOWAY SALE AT INTERNATIONAL.

What promises to be the greatest Galloway sale ever held in Britain or America in recent years will occur on December 22 at Chicago during the week of the International Live Stock Exposition. A glance at the names of the men who have consigned to this sale should reveal to every Galloway breeder what the offering has in store for him and the unique opportunity it affords to all stockmen to procure the best at public prices. The following breeders have contributed from their show herds: Brookside Farm Company, Fort Wayne, Ind.; W. M. Brown & Son, Carrollton, Mo.; C. E. Clarke, St. Cloud, Minn.; G. W. Lindsey, Red Cloud, Neb.; O. H. Swigart, White Heath, Ill.; Marion Parr, Harritown, Ill.; A. F. Craymer, Morris, Ill.; Michigan Premium Stock Company, Davisburg, Mich.; C. M. Moody, Atlanta, Mo.

The cattle for this sale were all inspected by a competent judge. There are only thirty-nine head catalogued, and they are the plums of the breed of both continents. Twenty-two

of the thirty-nine listed have won prizes at the leading breeding shows of the country, and the majority of the remaining seventeen possess the right type and quality for prize winners.

Never in the history of the Galloway cattle in Britain or America have animals of such excellent breeding and superior individuality been offered to the public. It is to be hoped that Galloway breeders, as well as stockmen who admire good beef cattle, will show their appreciation of this high-class offering by arranging to be present. This sale will furnish the last opportunity this year, and probably for several years to come, for breeders to secure animals of outstanding show ring merit at public prices that will strengthen their show herds for next year.

For catalogues and further information address Charles Gray, secretary, 17 Exchange avenue, Chicago.

OFFICIAL AGRICULTURAL CHEMISTS.

The Association of Official Agricultural Chemists, consisting of food chemists from the various State colleges and the Department of Agriculture at Washington, held its second annual meeting at Washington last week. Features of the meeting were papers read by Chief Chemist Wiley and others on food adulteration. The following officers were elected for the ensuing year: President, C. G. Hopkins, University of Illinois; vice-president, J. P. Street, New Brunswick, N. J.; secretary, Dr. H. W. Wiley, Chief of the Bureau of Chemistry, Department of Agriculture; members of Executive Committee: Professor Harry Snyder, University of Minnesota, and Professor M. B. Martin, University of South Carolina.

SITUATIONS ALWAYS OPEN.

If you have a job for a good man, or if you are the man in need of a good job, you can always get what you want through The National Provisioner's "Wanted" columns. Use page 48.

COTTONSEED AND ITS PRODUCTS IN ENGLAND

For cotton seed and the products derived therefrom there is a more extensive market in the United Kingdom than exists in any other country of Europe. A large seed-crushing industry, engaged in the expression and extraction of oil from various seeds and localized chiefly at some dozen ports of the Kingdom, gives rise primarily to a heavy demand for the raw material—cotton seed. From 500,000 to 600,000 tons (2,000 pounds each) are imported annually for crushing in the domestic mills, writes a government correspondent, and of the products derived therefrom the bulk of the oil and practically the whole of the oil-cake enter into home consumption.

Cotton seed crushing in the United Kingdom is not the exclusively specialized industry that it is in the United States. The processes of expressing oil from oil seeds by hydraulic pressure being practically the same for all kinds, many mills engage in a business of general seed crushing, and crush cotton seed, linseed or other oleaginous seed, as the exigencies of the occasion or of supply and demand require. In some of the better equipped mills a number of presses are used exclusively for cotton seed, a number for linseed, thus constituting virtually two separate plants, with some slight differences of equipment. In others, all presses are run at different times with the same equipment on either seed at will. A number of mills, however, crush only cotton seed, and the business, as a whole, may be regarded as a separate industry.

English View of Cottonseed Value.

From the English point of view, the sole economic value of cotton seed lies in its oil content and in the single by-product, oil-cake, the residue after the oil has been expressed. Linters and hulls, which constitute valuable by-products of the cotton seed industry in the United States, are not generally separated from the seed in the British process of manufacture. The seed is, with few exceptions, crushed undelinted and unhulled. The resulting mass—meats, hulls, and linters—is then pulverized and reduced to a fairly homogeneous meal by grinding it beneath "edge stones"—"tempering stones" they were called when formerly used in linseed oil mills in the United States.

The sole object of the pulverizing process is to reduce the hulls and linters to the best possible condition for animal food. This meal is then heated and pressed. The oil obtained is of an unedible quality, and is used almost exclusively in making soap. The residue is known as undecorticated cottonseed cake, and contains a large proportion of ground hulls and some short lint. It is in great demand, exclusively for cattle feeding, and sells upon the markets at a much cheaper price than the decorticated cottonseed cake imported from the United States.

From the cotton seed imported into the United Kingdom the domestic mills now obtain annually from 22,000,000 to 26,000,000 gallons of oil and from 440,000 to 515,000 short tons of oil cake. Although this country is, next to the United States, the heaviest consumer of cottonseed oil in the world, the annual output of the domestic mills is sufficient in quantity not only to supply the na-

tional needs, but also to supply a surplus of a few million gallons for export. True, considerable quantities are imported from the United States, the chief reason being that a large proportion of this is of the edible quality and of higher grades than are produced here.

Greatest Consumer of Oil Cake.

As to the by-products, cottonseed oil cake, the United Kingdom is the world's foremost consumer. The only use made of this product is as a cattle food, but for this purpose it is in such demand that the quantity made from imported cotton seed is wholly inadequate for the requirements of English stock feeders, and the half million tons now turned out annually by the domestic seed-crushing industry has to be supplemented by imports, roundly, of about 200,000 tons, less than one-half of which are now drawn from the United States. The Kingdom's consumption of cottonseed cake, decorticated and undecorticated, amounts at present to upwards of 600,000 tons a year. Of this the bulk is undecorticated and contains the finely pulverized hulls and linters in combination with the meats of the seed. Briefly, the cotton seed industry of the United Kingdom, dependent wholly for its supply of the raw material upon imported seed, produces an exportable surplus of the chief product, oil, but is still heavily dependent upon foreign countries for its supply of the by-product, the popular and valuable cattle food, oil cake.

The bulk of the cotton seed crushed in the United Kingdom is comprised of two varieties, known in the parlance of the trade as "Egyptian" and "Bombay." Up to 1901 Egypt had been for about forty years practically the one great source of supply. But in that year the high prices prevailing for Egyptian seed (the average price for the year, as laid down at British ports, was \$28.32 per 2,000-pound ton) and other causes led to an experiment in importing cheaper and economically less valuable seed from British India. This has since resulted in about 25 per cent. of the aggregate supply being drawn from that source, against about 65 per cent. from Egypt.

During the first year of the new trade the difference between the average price of Egyptian seed (including cost, insurance and freight to British ports) and that of the cheaper seed from Bombay was \$9.40 per short ton. But, owing partly to improvements in the condition and quality of the Indian shipments, this difference has been gradually narrowed down until in the calendar year 1904 Bombay seed was laid down at the ports at an average price for the year of \$20.10 per short ton, against an average of \$24.92 for seed of Egyptian origin, the low price of the latter seed, however, being partly due to the poor quality of the 1904 crop. Seed is also imported in small quantities from other sources. About 4 per cent. of the total British supply is drawn regularly from Brazil.

Supplies from the United States, formerly about equal to those from Brazil, have declined in recent years, and in 1904 amounted to only about 1 per cent. of the total. Small imports are also derived from Asiatic Turkey, Peru, the British West Indies, Colombia, Chile and a few other countries. The following statement gives, in tons of 2,000 pounds each, the total imports of cotton seed into the United Kingdom for the past five years, with imports from Egypt and British India shown separately from those of all other countries combined:

Year.	British		Other	Total.
	Egypt.	India.		
	Tons.	Tons.	Tons.	Tons.
1900.....	301,230	50	63,975	455,255
1901.....	390,299	49,495	49,812	489,606
1902.....	418,907	125,231	72,556	616,694
1903.....	350,952	197,887	53,150	601,989
1904.....	357,366	116,738	50,787	524,891

Egyptian and Indian Seed.

Egyptian seed and that from British India, as their respective prices would suggest, present characteristic and economically important differences. Of the two varieties, the Egyptian seed is the larger, and for a given weight of seed gives a heavier yield of oil and, consequently, a lesser yield of the residue, oil cake. The surface of this variety is smooth, the lint, excepting for a few adhering shreds, having been already detached by the process of ginning. In this respect the Egyptian seed resembles the seed of the sea island cotton. The yield of oil varies, of course, with the quality, condition, etc., of the seed, but the average yield per short ton is commonly estimated, oil, 350 pounds (or 46 2-3 gallons), and oil cake, 1,650 pounds.

The British Indian seed has a fuzzy surface, similar to that of American upland cotton seed, and in bulk the presence of lint is much in evidence. The quantity of oil obtained is commonly estimated by crushers at an average of 250 pounds (33 1-3 gallons) per ton, leaving a residue of 1,750 pounds in the form of oil cake, the comparatively small yield of oil being due partly to the presence of lint and partly to the inferior oil-yielding properties of the seed.

The chief difference between the products derived from the two varieties of seed is in the by-products. Oil cake from Egyptian seed contains a much smaller proportion of lint, and usually commands about \$5 per ton more in price. The relative cheapness of the so-called Bombay cake, however, causes it to be preferred by some feeders. The comparatively small quantity of cotton seed imported from other countries than Egypt and British India may be conservatively estimated as yielding about 300 pounds (40 gallons) of oil and 1,700 pounds of oil cake per ton of seed.

(To be continued.)

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THE BEEF INDUSTRY

Report of James R. Garfield, Commissioner of Corporations, United States Department of Commerce and Labor.

CHAPTER V.—COMPARISON OF THE PRICES OF CATTLE AND OF DRESSED BEEF.

(Continued from last week.)

Section 7. Interpretation of the Movement of Cattle Prices.

The prices of cattle having been determined, it remains to interpret their movements. In a preceding section of this discussion of cattle prices the various influences were considered which in general affect the price of cattle. The most important of these causes, and particularly those which are capable of being measured for successive periods of time, must now be brought into relation with the movement of the prices of cattle. There are two influences especially that should be considered here, namely, the changes in cost and the changes in supply. In the discussion of the changes of supply account will be taken of the changes in average live weight and of the dressing percentage, which brings into consideration the most important elements of quality. Finally, some consideration will be given to the movement of the prices of the principal by-products, hides and fat.

1. Movement of cost of production of cattle.—The movement of the cost of production generally exercises a considerable influence on the price of a commodity, but it does not appear that there is a very direct correspondence between the costs of production of cattle and cattle prices. There is no statistical record of the actual changes in this respect from year to year, although the changes in cost may be approximated, perhaps, by a comparison of the price movements of the principal raw materials of the cattle feeders. It may be assumed that the situation of the man who is both a cattle feeder and farmer is typical of the business of producing shipper cattle; that is, the man who raises a part of his corn, but not necessarily or probably all that he needs for the whole feeding year.

Chief Elements of Cost.

The principal elements of cost for preparing beef cattle are feeder cattle and corn. These together probably come to 75 per cent. of the total cost of putting them on the market. For the purposes of the present comparison, therefore, data are required on three points—(1) the cost of feeders, (2) the cost of corn, (3) the selling price of beef cattle. The prices of these three commodities are presented for quarterly periods—1901-1903—in the table which follows:

CHICAGO PRICES OF BEEF CATTLE, FEEDERS, AND CORN, BY QUARTERS, 1900-1903.

[Beef cattle prices from one packer in Chicago, which were the only ones available for the whole period. Prices of stockers and feeders, average of monthly means from Chicago Stock Yards Annual. Prices of corn, average of monthly means from Forty-sixth Report of Trade and Commerce, 1903.]

Period.	Beef cattle (per hundred-weight).	Feeders (per hundred-weight).	No. 2 corn (per bushel).
1900:			
First quarter.....	—	\$4.01	\$0.533
Second quarter.....	—	4.20	.594
Third quarter.....	\$4.87	3.00	.407
Fourth quarter.....	4.85	3.33	.398
1901:			
First quarter.....	4.68	3.50	.39
Second quarter.....	5.11	3.74	.429
Third quarter.....	4.98	3.24	.548
Fourth quarter.....	5.17	3.14	.604

1902:			
First quarter.....	5.37	3.74	.563
Second quarter.....	6.35	4.09	.629
Third quarter.....	5.70	4.00	.629
Fourth quarter.....	4.70	3.48	.546

1903:			
First quarter.....	4.48	3.59	.444
Second quarter.....	4.76	3.78	.46
Third quarter.....	4.44	3.80	.506
Fourth quarter.....	3.82	2.92	.434

An inspection of this table shows for beef cattle and corn a considerable similarity of price movement, and this is in some respects even more marked for feeders. The similarity of feeder prices to beef cattle prices is probably partly due to the fact that to some extent feeders and beef cattle are interchangeable; that is, when cattle prices are high even an unprepared or half-prepared animal has value for beef production, while if prices are low neither of them is in much demand. In the same way there is a certain relation of cost between a contemporaneous high price of corn and a high price of cattle, but this is particularly true only when the corn price is maintained at a high point for a long period, because it indicates to feeders a probable high cost of production.

It is very doubtful, however, if such a comparison of simultaneous price movements is appropriate for the problem under consideration, viz., relations of cost of raw material to finished product, because, as has been pointed out above, the price of corn at the beginning of the fall is probably more significant for dressed-beef cattle for the ensuing nine months than the fluctuations from month to month. For the last or summer quarter the current price is perhaps more important. Similarly, for feeder cattle; on an average it would be safe to allow probably six months between their purchase and sale as finished cattle. The following table is constructed, therefore, on the following basis: (1) The cattle price is given chronologically by quarters; (2) the corn price is given for the last quarter of the year at the current average for the quarter, for the first quarter of the next year at the price of the preceding quarter plus interest at 2½ per cent. (10 per cent. per year being assumed), at the second quarter at the same price plus interest at 5 per cent., and at the third quarter at the current quarterly price of corn; (3) the price of feeders placed opposite the current price of finished cattle is the cost of the feeders for the quarter six months previous. This shows the relative, not the absolute, estimated cost of feeders.

PRICES OF BEEF CATTLE AT CHICAGO AND ESTIMATED CORRESPONDING COST OF FEEDERS AND CORN, BY QUARTERS, 1900-1903.

Period	Beef cattle (cents per pound).	Feeders (cents per pound).	Corn (cents per bushel).
1900:			
First quarter.....	—	—	—
Second quarter.....	—	—	—
Third quarter.....	4.87	4.01	40.7
Fourth quarter.....	4.85	4.20	39.8
1901:			
First quarter.....	4.00	2.80	40.8
Second quarter.....	5.11	3.23	41.8
Third quarter.....	4.95	3.29	54.3
Fourth quarter.....	5.17	3.74	60.4
1902:			
First quarter.....	5.37	3.34	61.9
Second quarter.....	6.35	3.74	65.4
Third quarter.....	5.70	3.74	62.9
Fourth quarter.....	4.70	4.00	54.6

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PROPOSAL.

PROPOSALS FOR FROZEN FRESH BEEF AND MUTTON.—HEADQUARTERS PHILIPPINES DIVISION, office of the Chief Commissary, Manila, P. I., November 10, 1905.—Sealed proposals, in triplicate, will be received at this office until 11 o'clock a. m., March 20, 1906, at which time and place they will be opened in the presence of the attending bidders, for the furnishing and delivery of six million six hundred thousand (6,600,000) pounds of frozen fresh beef, and two hundred thousand (200,000) pounds of frozen fresh mutton to the Subsistence Department at Manila, P. I., during the year ending June 30, 1907. The accepted beef and mutton will be admitted free of customs duties.

The United States reserves the right to decrease the amount called for in the contract, by not to exceed 40 per cent, upon reasonable notice to the contractor, or to increase the amount called for, with the consent of the contractor.

Each proposal must be accompanied by a bidder's guarantee in the amount of \$20,000, or by certified check for that amount on a bank of approved standing in Manila. The bidder, to whom contract is awarded, will be required to give bond, the penalty of which will be fixed by the Chief Commissary.

Information furnished on application to this office or to the office of the Purchasing Commissary, U. S. Army, 39 Whitehall street, New York City. Envelopes containing proposals should be marked: "Proposals for frozen fresh beef and mutton for fiscal year 1907, to be opened March 20, 1906," and addressed to the undersigned, A. L. Smith, Lt. Col., D. C. G., U. S. Army, Chief Commissary. N 18 D 23 J 27 F 24.

1903:			
First quarter.....	4.48	4.00	55.8
Second quarter.....	4.76	3.49	57.3
Third quarter.....	4.44	3.59	50.8
Fourth quarter.....	3.82	3.78	45.4

In the preceding table a comparison of the prices of beef cattle with that of feeders fails to show any harmony of movement. The slight similarity in the movement of beef cattle and corn can not be regarded as due to a causal relation between them. It is important to observe the annual variations in the prices of corn and feeders, as well as the movements during different seasons of the year. For the period 1900-1903 the annual price movement of corn was as follows:

Year.	Average price (cents).	Index No.
1900.....	38.3	79
1901.....	50.0	108
1902.....	59.9	129
1903.....	46.1	96
Average.....	48.6	100

The annual movement of prices for stockers and feeders for 1900-1903 is shown in the following table:

Swift's Choice Dressed Beef

Mutton, Lamb, Veal, Pork, and Provisions

FOR SALE AT THE FOLLOWING BRANCH HOUSES

NEW YORK

Barclay Street Market, 105 Barclay Street
Gansevoort Market, 22-24 Tenth Avenue
West Washington Market, West and Bloomfield Streets
Thirteenth Street Market, 32-34 Tenth Avenue
Manhattan Market, W. 35th Street and Eleventh Avenue

West 39th Street Market, 668-670 West 39th Street
Westchester Avenue Market, 769-771 Westchester Avenue
West Harlem Market, 130th Street and Twelfth Avenue
Eleventh Avenue Market, Eleventh Avenue, bet. 34th and 35th Streets
Murray Hill Market, Foot East 31st Street
West Side Slaughter House } 664-666 West 39th Street
West Side Market }

BROOKLYN

Williamsburg Market, 100-102 North Sixth Street
Brooklyn Market, 182-184 Ft. Greene Place
Atlantic Avenue Market, 74-76 Atlantic Avenue
Ft. Greene Sheep Market, 172 Ft. Greene Place

JERSEY CITY

Wayne Street Market, Corner Wayne and Grove Streets
Ninth Street Market, 138 Ninth Street

Swift & Company New York

Central Office, Nos. 32-34 Tenth Avenue

Year.	Average price.	Index No.*
1900.....	\$3.53	106.7
1901.....	3.43	94.7
1902.....	3.53	105.7
*1903.....	3.40	93.9
Average.....	\$3.62	100.0

*This index number is obtained by making the average (48.6) equal to 100, and finding the relative value of the number for each year by proportion.

It appears that the elements of cost were low on the average in 1900, which would correspond to a low cost of production for beef cattle marketed in the fall of that year and in the first half of 1901. For the first half of 1901, on the other hand, the costs averaged about normal, and hence the costs of

production of beef cattle marketed in the last half of that year (1901) were about normal; but the prices of corn went up rapidly for the last half of 1901, and although there was some decline in the price of feeders in that period it appears sufficiently evident that the costs of production were abnormally high for the first half of 1902. Since the price of corn remained equally high in the beginning of 1902, while the price of feeders was higher than in the last half of 1901, the cost of production for the second half of 1902 was probably even higher. The same influences combined, in about the same degree apparently, to keep up the cost of pro-

duction to a high point in the first half of 1903. For the second half of 1903, on the other hand, the reduced costs of corn and of feeders for the preceding half year tended to diminish the cost of production. At the end of 1903 corn averaged a little higher, but feeders were much lower, so that it appears that the cost of production for cattle marketed in the first half of 1904 was much lower, and probably lower than for any period since the first half of 1901.

(To be continued.)

Note.—The publication of the official report of Commissioner Garfield on his investigation of the beef industry began in the issue of The National Provisioner of March 25.

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MEAT INSPECTION FEES

The matter of government inspection of meat products and the cost thereof will probably engage the attention of Congress at the coming session. The chronic enemies of the entire packinghouse industry may endeavor to have the cost charged to the packers by the medium of a fee for each animal inspected. Any such an attempt should be killed and quickly—not in the interest of the packers, but in that of the general public. A fee of this nature would be figured by the packers, and justifiably so, as an additional item of cost which would be paid by the consumer in an addition to the selling price. The blow, then, would be aimed directly at the meat-eating public and would not affect the packer.

The inspection of meats by the national government is a commendable species of legislation, but its scope should be reasonably increased. It is designed to protect both domestic and foreign consumers from diseased or unwholesome meat products, and its practice has given a feeling of security in

this respect which is worth many times its cost. The benefit to the packers is indirect, but to the consumer it is both direct and essential, and being an assurance that one of the greatest necessities of life is pure and untainted it is only reasonable that the expense should be borne by the national treasury and therefore by all classes. If meat were a luxury the proposition would be different.

The appropriation for meat inspection is, however, somewhat inadequate. The Bureau of Animal Industry has sufficient funds for inspecting the inter-state and export trade of such packers as are now having this service, but the amount allowed by Congress does not permit of extension of this important feature of the meat trade. It should be sufficient to cover every packinghouse doing an export or an inter-state business, and without exception. The additional amount required to do this would not be large.

There is no more important phase of the pure food question than this. Substitution is reprehensible, labelling is debatable, preservatives are essential, but there is no room for argument where the possibility of diseased meat exists.

Congress should make an adequate appropriation.

TAINTED TESTIMONY

A phase of the prosecution by the government of certain big packers developed last week which might have been expected to make itself evident before this. Two men, former confidential employees of one of the indicted packers, were arrested in Chicago while engaged in an attempt to extort a large sum of money from this packer's attorney as the price of withholding what they claimed to be damaging evidence against this packer. It was stated that these men, while in the employ of the packers referred to, had copied certain correspondence and other business details from the records of the company, intending to use them as a means of extorting blackmail. They failed of their object, for instead of getting the money they expected, they got a cell in jail, where they will have an ample opportunity to think it over.

These men were not quite as shrewd as other ex-employees of certain packers who are being prosecuted by the government. Several of these discharged subordinates, instead of risking the penalties of the penal code for blackmail or extortion, went direct to the government attorneys with matters which they had filched from the private records of their employers. They received their reward in other ways. The packers themselves threw open their books and records to government investigators, having nothing to conceal, and they claim that it

was on the facts which they thus furnished that the government is proceeding against them. The government's Department of Justice has denied this—to escape having the indictments thrown out of court under the immunity clauses of the interstate commerce and corporation laws.

The government prosecutors prefer to base their hopes on the tainted testimony which they secured from ex-employees of the packers. Just how much credence a fair-minded jury would give to such evidence remains to be seen when the cases come to trial—if they get that far. A prosecution based on testimony furnished either by blackmailers, or by those who would have been blackmailers had they had the courage, may not get as far as the jury room.

OCTOBER EXPORT FIGURES

Export figures compiled from government statistics for the later months of 1905 continue to show improvement in our foreign meat and provision trade for the year, which began with a falling off of something like ten million dollars in export values as compared with 1904, but which shows an export total for the ten months of 1905 greater in value by fourteen million dollars than for the same period a year ago. The October showing added a round million to the year's gains. For the year to November 1 there were notable increases in all meats and provisions except fresh beef and butter. We are consuming most of our beef at home. As for butter, the silly sentiment which makes salt the only permissible preservative has given the American butter trade a black eye wherever it comes in competition with the better kept dairy product of those countries which permit the use of borax in the preparation of butter for export.

PLENTY OF POULTRY

The turkey is king again. There is going to be plenty of him this year, and indications are that Thanksgiving markets will not be so nearly out of range of the consumer's pocketbook as they were last year. The crop of all kinds of poultry has been plentiful, and big wholesale handlers have vied with each other in collecting it. Now they are eyeing each other and waiting for price developments. There were some backs broken last year trying to hold up a high market, and the chances are that the risk will not be repeated this year. Fancy stuff will readily bring fancy prices, but the general run will hardly go above 20 cents. Whether it ranges a cent or two under or over depends on the extent of market manipulations. The beef market is dead and the lamb market comatose. There is nothing to it but poultry.

TECHNICAL AND SCIENTIFIC

FORMALDEHYDE FROM SUGAR.

The natural distribution of formaldehyde in its free state as well as its formation during natural processes appears to have been grossly underestimated. When it is a well known fact that a large number of plants contain considerable quantities of sugars, it will be not surprising to follow the conversion of this sugar into formaldehyde, and its natural presence, therefore, in smoked meats, not as an added quantity, but as a natural constituent of the smoke, and hence of the meat also.

Sugar heated to 105 degrees C. gives off, after some hours, sensible amounts of formaldehyde, and as the temperature to which it is heated is raised, the evolution of the aldehyde becomes more rapid. The gases from burnt sugar contain in percentages 0.2 to 5.7 of formaldehyde; 0.1 to 0.5 of methyl alcohol; 0.1 to 5.0 of acetone; 1 to 3 of acetic acid; 1.0 to 3.0 of phenols and their derivatives; 0.5 to 1.4 of benzaldehyde. The formaldehyde is thus accompanied by substances which intensify its antiseptic action, either directly or by retarding its polymerization.

THE TESTING OF GLUE.

Dr. Kissling is of the opinion that the usual methods, viz., either throwing down the gluten with tannin or direct determination of the nitrogen present, affords no accurate test of the value of a glue. He recommends taking the fusion point of the jelly made by soaking the glue in water. He states that as regards adhesive power, cheap bone glue is the equal of the best leather glue, but for lining casks leather glue is better, as the jelly is much firmer. The solidity of the jelly depends upon the method of manufacture, and the more of the gluten is changed into glucose during the processes, the less solid is the jelly. The durability of a glue may be judged by its smell, and leather glues are more durable than bone glues, having less smell. The amount of free and combined sulphurous acid present is often very important, and leather glues are better in this respect than bone glues. The determination of water, fat, or ash is of little value. Of late the manufacture of bone glue has been greatly improved, and good bone glue is the equal of medium leather glue in every respect. Kissling says that solidity of the jelly and freedom from acid and from smell are the tests of a good glue. Mixed glues are to be avoided, for they combine the price of leather glues with the nature of bone glues.—*Farben Zeitung.*

BOILER ECONOMY.

Of all known methods of burning soft coal, the worst is the one which is the most commonly practiced, viz.: that of burning it in a common furnace, consisting of a set of grate bars, and a space of contracted dimensions between them and the heating surface of the boiler, the coal being fed by hand. This method is suitable for anthracite coal, the smaller sizes containing much surface moisture perhaps excepted, but when used for bituminous coal it is objectionable both

on account of smoke and on account of loss of economy. The objections to the method increase the farther we go west from the anthracite coal fields of Pennsylvania, being least with the semi-bituminous coals of Pennsylvania, Maryland and Virginia, and increasing as we go westward and find the percentages of moisture and of volatile matter both increasing.

The reasons for the difficulty in obtaining high economy from the bituminous coal when hand-fired in ordinary furnaces may perhaps be understood if we consider the sequence of events that take place between two consecutive firings at an interval of say five or ten minutes apart. Suppose that just before firing fresh coal an intensely hot bed of coke, say six inches deep, is lying on the grate-bars. Half a dozen shovelfuls of coal, much of it of fine size, are spread evenly over the bed. The first that the fine coal does is to choke the air spaces existing through the bed of coke, thus shutting off the air supply which is needed to burn the gases produced from the fresh coal. The next thing is a very rapid evaporation of moisture from the coal, a chilling process, which robs the furnace of heat.

Next is the formation of water gas by chemical reaction, the steam being decomposed, its oxygen burning the carbon of the coal to carbonic oxide, and the hydrogen being liberated. This reaction takes place when steam is brought into contact with highly treated carbon. This also is a chilling process, which robs the furnace of heat. The two valuable fuel gases thus generated would give back all the heat absorbed in their formation if they could be burned, but there is not enough air in the furnace to burn them. Admitting extra air through the fire door at this time will be of no service, for the gases being comparatively cool cannot be burned unless the air is highly heated.

After all the moisture has been driven off from the coal, the distillation of hydrocarbon begins and a considerable portion of them escapes unburned, owing to the deficiency of hot air, and to their being chilled by the relatively cool heating surfaces of the boiler. During all this time great volumes of smoke are escaping from the chimney, together with unburned hydrogen, hydrocarbons, and carbonic oxide, all fuel gases, while at the same time soot is being deposited on the heating surface, diminishing its efficiency in transmitting heat to water.

CLASSIFICATION OF BUTCHER HOGS.

Hogs known under the name of "butcher hogs" in the market weight from 180 to 350 pounds, and are divided as follows: Heavy butchers, with a weight of from 280 to 350 pounds. These again are subdivided into prime and good, according to quality. Medium butchers weigh from 220 to 280 pounds, and light butchers from 180 to 220 pounds. The latter two classes are graded into prime, good and common.

Butcher hogs are commonly used for the fresh meat trade and constitute about 25 per cent. of the hogs coming, for instance, into the Chicago market. Butcher hogs as a class are principally barrows, and range in age from

six months for light butchers to one year for heavy butchers. Other things being equal, barrows sell more readily and at better prices than sows. In a drove of butcher hogs there may be present a few good sows without detracting from the value of the drove.

Hogs that will grade "prime butchers," either heavy, medium or light, must be perfect in quality, ideal in form, and must show much evidence of ripeness in condition as well as maturity. "Good butchers" though not equal to prime butchers, are still very good representatives of highly developed hogs. Compared with prime butchers, the good butchers may be slightly deficient in form, or a little lacking in quality or maturity, or may be lacking somewhat in condition. "Common butchers" are found only in the medium and light butcher classes. The common butcher hog is one that shows considerable evidence of having been well fed, and possesses compactness, smoothness and firmness. Frequently, however, he is not a mature animal, and is considerably more deficient in form, quality and condition than the prime butcher hog.

NEW PATENTS.

804,001. Ice cutting machine. Ira Boyd, Ponbill, Pa. The combination with cutting mechanism, of means for automatically striking the ice at intervals for breaking cakes of the desired size, and a transversely-disposed blade movable with the said striking means and connected between its ends with the same.

804,004. Filter. James G. Garland, Pittsburgh, Pa. The combination of a casing, having a plurality of compartments formed therein, an auxiliary casing carried by said casing, a screen mounted in said auxiliary casing, one of said compartments having an opening formed therein, a sieve carried by the top of said compartments, a sieve mounted in another of said compartments, means to convey the contents of the auxiliary casing to the bottom of the first-named compartment, means to control the opening formed in the top of said compartments, means to heat said compartment, means to convey the contents of said compartment above the sieve of the last-named compartment, means to withdraw the contents of said compartment, and means to determine the height of the contents within said compartment.

804,042. Apparatus for melting ice. Henry C. Reichardt, Pottsville, Pa. The combination with a water-pipe, of an air-pipe extending longitudinally of the water-pipe and having an open inlet end and an open discharge end, a burner located adjacent to said inlet end, and means for discharging compressed air into the air-pipe to cause a current of air to pass through the air-pipe, whereby the current of air may be heated by the burner to melt ice within the water-pipe.

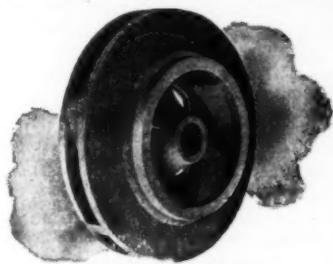
SOME STURTEVANT SALES.

Among recent sales of mechanical draft apparatus made by the B. F. Sturtevant Company, Boston, Mass., may be mentioned the Illinois Central Railroad Company, Chicago, Ill.; Cleveland-Cliffs Iron Company, Ishpeming, Mich.; Jefferson County Jail, Louisville, Ky.; Eaton, Cole & Burnham, Bridgeport, Conn., and the U. S. Custom House, N. Y.

FOR PURCHASING DEPARTMENTS

CENTRIFUGAL PUMPS.

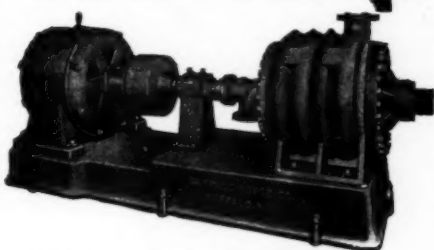
For the engineer as well as the layman, the centrifugal pump has long stood for a rather crude device consisting of a shell within which revolved a spider with paddle-shaped arms. When inlets and exits were placed in connection with the center and periphery, such a pump could handle large quantities of water delivering against a head of a few feet. Its sole claim to recognition lay in its ability to handle nearly anything in the way of solid matter which the pipes would accommodate, coupled with the fact of its large capacity and simplicity. A plausible explanation of the operation of such pumps might have been that any liquid subjected



AN ENCLOSED "RUNNER."

to such a vigorous churning would strive to escape the nearest way and thus produce the pressure head. At any rate, logical inquiry and experiment brought little improvement in centrifugal pump design until the last few years. Although denied the stimulation often offered such objects by engineering societies and technical school research, the centrifugal pump has been developed and perfected until results are obtainable to-day which are in the nature of a revelation to those not closely identified with the subject, and which make its relation to the direct acting pump almost identical with that of the steam turbine and reciprocating engine.

As an indication that the centrifugal pump is coming into its own, it will be remembered that three centrifugal pumps of a capacity of some 35,000 gallons per minute against a head of some 160 feet supplied the water for the grand cascade at the St. Louis Exposi-



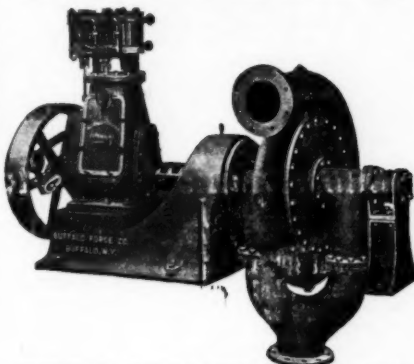
FOUR-STAGE TURBINE CENTRIFUGAL PUMP.

tion. Now the city of Buffalo is installing a multiple stage turbine pump to augment its triple-expansion pumping engine service with the expectation of superseding one of the engines by a second centrifugal if the first proves satisfactory.

Aside from improvement in detail, the modern centrifugal pump design shows three distinct departures from its spider-and-paddle progenitor. The rotating element variously called the "runner" or "impeller" is now of the enclosed type, permitting of the liquid passing undisturbed from inlet to periphery through a continuous passage. This will be better understood from a reference to the accompanying cut. This shows a 5-bladed impeller with a single entrance. It will be observed that there is no opportunity for loss by eddies or leakage, and the connection between the rotating element and shell is at a machined surface and therefore susceptible of accurate fitting.

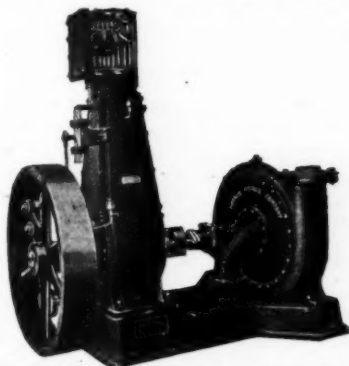
The determination of the proper curvature of these blades or partitions, together with the angles at which the liquids are received

and discharged, is the second step in the development of the centrifugal pump as we know it to-day. It has been found that changes in the curvature of these blades will produce marked differences in the behavior of a pump as the operating conditions vary.



HIGH-SPEED DOUBLE-ACTING ENGINE DIRECT-CONNECTED TO CENTRIFUGAL PUMP.

Thus an impeller whose blades terminate radially has the property of preserving a constant head irrespective of the volume of water delivered, providing its speed be kept uniform. This design is applicable for city water supply, boiler feeding, condenser circulating pumps, etc. On giving the blade tips a curvature in the direction of rotation such an impeller will increase its head with its delivery providing an ideal means of maintaining a constant pressure at any distant point in a distributing system. Draw-



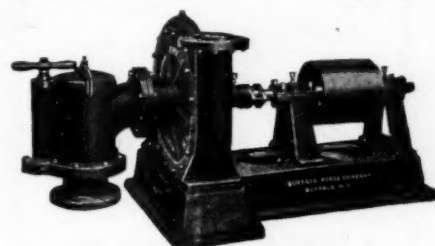
CENTRIFUGAL PUMP DRIVEN BY SIMPLE ENCLOSED VERTICAL ENGINE.

ing off a large volume at such a point increases the liquid velocity and therefore the friction head, which is compensated for by the increase in head as supplied by the pump. For dry dock, caisson or excavating work, it is desirable to have a pump which will run at constant speed and full load, as the head increases with the removal of water from the enclosure. This necessitates that a large volume of water must be handled at the start, gradually diminishing as the head increases. This situation is met by giving

the blades a curvature towards the direction of rotation when such a pump will deliver liquids against an increasing head with a decreasing volume at a practically uniform efficiency.

This control of the relationship of head and volume proves of practical value in the operation of these pumps by motors. Any increase above the normal horse power delivered by the motor such as might be occasioned by an accidental reduction of head would be liable to overload and possibly burn out the motor. Such an accident is prevented by the nature of the impeller surfaces, which may be so laid out that any appreciable diminution of the head after a fixed limit will not be accompanied by an increase in volume delivered, and the horse power delivered by the motor will not show a dangerous increase.

The third marked improvement in centrifugal pump design is the use of what are called "diffusion vanes," situated in the periphery of shell of the pump next the runner. These are so designed as to receive the water as it comes with a high velocity from the runner and, through the shape and area of the water passages they form, reduce the velocity to



CENTRIFUGAL PUMP WITH HAND PRIMER.

pressure head without disturbance or unnecessary friction. As the problem of the centrifugal pump is essentially that of giving a continuous stream of water a high velocity and then allowing the reduction of same to static head and ordinary pipe velocities, the most efficient pump will be one which accomplishes this with the least shock, friction, loss by eddies, and leakage. In the high efficiency pumps these diffusion vanes play an important part in gradually changing the velocity to pressure head without loss by shock. These diffusion vanes are a replica of the guide vanes of a water turbine and are responsible for the name assumed by such pump as "turbine centrifugals."

With the improvements the efficiency of the centrifugal pump has steadily advanced until a figure of 75 per cent. has been shown by creditable tests, with the result that there has been an enlarged field open to its use and a demand created for such pumps capable of delivering against comparatively high heads. For such service an ordinary centrifugal pump requires an extremely high rate of rotation for the runner or a shell of an impractical diameter and in either case, due to the increased hydraulic friction at high speeds, there will be a serious loss of efficiency. The multiple stage centrifugal obvi-

(Concluded on page 30.)

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SEE PAGE 48
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NEW CORPORATIONS.

Milwaukee, Wis.—Gustav A. Kletzoeh, August Sohner and John C. Karel have incorporated the Nutricia Milk Company with a capital of \$15,000.

Brinkley, Ark.—The Southern Creamery Company has been organized by H. G. Duttlinger and others of Memphis, Tenn. About \$25,000 will be invested.

Clarksdale, Miss.—The Mississippi Ice Company has been incorporated with a capital stock of \$25,000 by W. A. Crawley, R. H. Crutcher and E. B. Hardy.

Haubstadt, Ind.—The Haubstadt Creamery Company has been incorporated with a capital stock of \$5,000. The company comprises the farmers of this section.

Madison, Wis.—The Madison Dairy Produce Company has been incorporated with a capital stock of \$6,000 by Ezra Brown, Philip Kuehn, Adam Blind and John Huegel.

Dayton, O.—The Conover Creamery Company has been incorporated with a capital of \$300,000, by George Buck, O. W. Irvin, Victor H. Conover, Charles T. Owen and Charles T. Hardman.

Kremlin, Okla.—A. L. Reims, Charles Winston, John P. Seapy, George Phares, L. L. Hooker and T. T. Cummings have incorporated the Kremlin Co-operative Creamery Company with \$10,000 capital stock.

Cascade, Mont.—The Cascade Creamery Company has been incorporated with a capital stock of \$6,000 to operate a creamery. The incorporators and directors are Frank Warner, Henry Schrammeck, August Wedsworth and others.

Midlothian, Tex.—L. O. Moore, W. W. Major, F. A. Posey and T. M. Dills have incorporated the Midlothian Ice, Light & Water Company with a capital stock of \$20,000, to operate an ice factory, gas, electric light and power plants.

Columbus, Ga.—The Columbus Ice & Cold Storage Company has been incorporated with a capital stock of \$100,000. The incorporators are E. Woodruff of Atlanta, Ga., Louis Hamberger, T. E. Blanchard, Rhodes Browne, E. W. Swift, J. P. Kyle, H. L. Woodruff and J. L. Willis.

Canajoharie, N. Y.—The Mohawk Packing Company has been incorporated with a capital stock of \$10,000 to build abattoir and cold-storage building. The incorporators are Bartlett Arkell, E. B. Burnap and W. H. Lipe, of Canajoharie, and Daniel E. Wing and Ralph P. Buell of New York City.

ICE NOTES.

Little Rock, Ark.—The Lippincott Company is in the market for a 100-ton ice machine.

Crowley, La.—The establishment of a 10-ton ice plant is contemplated by Armas Duio.

New Orleans, La.—The Crescent Ice Company will install a 200-ton absorption machine. L. P. Hart is president.

West Point, Va.—An ice factory with a daily capacity of 15 tons will be erected by the West Point Oyster Company.



Navasota, Tex.—The R. A. Horlock Company, incorporated, is enlarging the daily capacity of its plant to 80 tons.

Salina, Kan.—The H. D. Lee Mercantile Company will erect a six-story cold-storage plant, to be completed by April 1, next.

Huntingburg, Ind.—Charles Moenkhaus and George Seubold, proprietors of the Huntingburg Brewery, contemplate the erection of an ice plant.

Tutwiler, Miss.—The Standard Wheel Company's building has been purchased by W. A. Browley & Company, who will convert it into an ice factory.

Chicago, Ill.—The Chicago Cold Storage Company has purchased a piece of property on Michigan avenue, on which it will expend \$10,000 in making improvements.

Wales Center, N. Y.—The creamery and ice houses of the Richardson & Beebe Company were destroyed by fire recently with a loss estimated at \$10,000, partially insured.

Greenwood, S. C.—A company is being organized to establish an ice plant and bottling works by W. R. Cothran, W. T. Jones and others. The capital stock will be \$20,000.

Maringouin, La.—At a recent meeting of the stockholders of the Maringouin Gin Company it was decided to erect a 20-ton ice plant, to be run in conjunction with the cotton gin plant.

Montreal, Can.—Lovell & Christmas Company, Limited, exporters of cheese, will erect a thorough, modern equipped cold-storage and ice plant. The cost will be in the neighborhood of \$60,000.

Sheffield, Tenn.—John Trick and associates, of Indiana, Pa., are organizing the Sheffield Brewing & Ice Company. They have already bought the old Sheffield brewery building and grounds adjoining.

Memphis, Tenn.—The Bohlen-Huse Ice Company will expend \$100,000 on improvements to its plant, including the erecting of a two-story stable, 110x230 feet, and the erection in South Memphis of a 1,000-ton cold-storage plant.

Santa Rosa, Cal.—The National Ice Company has purchased land at the intersection of the California, Northwestern and Petaluma and Santa Rosa railroads, on Sebastopol avenue, and will commence the erection of a large ice factory and cold-storage plant, to cost about \$100,000.

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PRESERVATION OF FISH BY FREEZING. (From Cold Storage & Ice Trade Journal.) (Concluded from last week.)

It was thought that the fish were not brought into close enough contact with the freezing mixture by Piper's process and metal telescoping boxes were devised in 1868 by William Davis in which the fish to be frozen were laid, the telescoping cover was then placed over them and the boxes were packed in salt and ice, in alternate layers. Some dealers with a view to bringing the fish in still closer contact with the freezing medium, packed each individual fish in a thin rubber bag and then packed them in salt and ice, thus exposing the entire surface of the fish and freezing them much quicker. After freezing, the bag was dipped into water and thawed off sufficiently to remove the fish. This method was, however, found to be impracticable and was abandoned in favor of the older panning process, which obtains to this day. As the trade developed, the size of the storage houses was increased and improvements were made in the shape and arrangement of the salt and ice tubes and in the method of handling and preparing the fish. Salt and ice freezes were located at nearly all the fishing ports on the Great Lakes and several on the New England Coast. About ten small ones were in operation in New York City. Some of the freezers on the Great Lakes had a storage capacity of 1,500,000 pounds and the aggregate capacity of all of the freezers in the country would, at that time (1892), closely approximate 15,000,000 pounds of fish. In those days, what is now known as the sharp freezer, was often merely a box constructed of rough lumber, in one of the storage rooms in which the pans of fish were packed in salt and ice to freeze. After the freezer was filled to its capacity the temporary sharp freezer was removed and the space used for storage. The freezers were commonly insulated with mill shavings, sawdust, charcoal, straw and slag wool, to a thickness of 16 to 18 inches. As the protection of these hygroscopic materials against moisture was not fully understood, nor the necessity of such protection appreciated, a rapid deterioration of the insulation resulted. The vertical tubes of galvanized iron were gradually changed in shape from taper to straight tubes and the upper ends of the tubes were extended through the ceiling to the floor above, so that they could be charged with ice and salt without opening the storage rooms. The tubes used were generally about 10 inches in diameter, 8 to 10 feet long, according to the height of the room, and the brine from the ice and salt drained into a gutter, from whence it was carried through the insulation by means of a pipe and trap. The capacity



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The Vogt Machines may be depended upon to meet your requirements, no matter how rigid they may be. Based upon the Absorption System—the only really scientific refrigerating system—these machines produce results not otherwise possible.

We want every packer who is thinking of installing refrigerating machinery or making any changes to hear our story before he makes any decision. We like to get inquiries and to answer them.

HENRY VOGT MACHINE COMPANY
10th Street and Ormsby Ave. LOUISVILLE, KY.

of the ice and salt tubes was so proportioned that it was not necessary to charge them oftener than once a day, during the warmest weather.

With ice and salt mixed in the proportion of two parts of crushed ice to one part of salt, temperatures as low as 5° F. below zero in the tubes and as low as zero in the rooms were attained. To attain temperatures in the rooms to within 5 degrees of the temperature of the mixture in the tubes, requires a large proportion of tube surface, to contents of room and excellent insulation.

The ice is first passed through an ice crusher, where it is reduced to small pieces. It is then mixed with salt in the proportion of 8 to 16 pounds of salt to 100 pounds of ice, as it is shoveled from the crusher into the sharp freezer. The finer the salt the lower the resulting temperature, but more fine salt is required than of the coarser grades. The amount of ice and salt required to freeze a given quantity of fish, depends upon the fineness of the ice and salt and the proportion of the two ingredients. A greater proportion of salt to ice produces lower temperatures and consequently quicker freezing. The most economical proportion, is, however, about 8½ pounds of salt to 100 pounds of ice, and this quantity will freeze about 100 pounds of fish. Larger quantities of ice and salt are required in warm weather, dependent upon the excellence or otherwise of the insulation and the temperature of fish when put into the sharp freezer.

W. H. BOWER, General Manager. GEORGE R. BOWMAN, Secretary and Treasurer.

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COLD STORAGE

ICE TRADE JOURNAL

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To prepare the sharp freezer, an even layer of ice and salt, 4 inches deep, is placed in the bin, and a tier of pans filled with fish is laid upon it. This followed with alternate layers of ice and salt, 3 inches thick, and pans of fish, and the top layer of pans is then covered with 6 to 8 inches of ice and salt. Boards are placed around the pile until

it is built to the height desired, and the whole is covered with canvas until the fish are frozen. The freezing usually requires 18 hours, after which the fish are ready for the storage room. The pans upon removal from the sharp freezer are passed through water or under a sprinkler to loosen the cover and the bottom from the block of fish and at the same time the fish become coated with a thin layer of ice, or glazed.

A description of the present-day fish freezer, together with the preparation of the fish for freezing, will appear in a later issue.

AN ICE MACHINE ON THE STAGE.

Refrigeration in ice skating rinks is nothing new, but here is an enterprising amusement caterer who has actually taken the ice machine on to the vaudeville stage. The Remington Machine Company has just completed an ice-making plant which is different from anything manufactured by any concern in the world before, and it will be used by a vaudeville artist in an act entirely new to the theatrical profession.

Earle Reynolds is the vaudeville artist, and his act will consist of a series of dances on ice with ice skates on the stage. At the plant of the Remington Company, at Wilmington, Del., last week, he gave exhibitions with hockey skates on an artificial rink, executing waltzes, schottisches, buck and wing and other dances, his "human top spins" thrilling the spectators. Reynolds was the world's champion speed skater for the seasons of 1896-97-98-99, and appeared in all the large rinks in this country, Canada and England. He conceived the idea of appearing on

the stage of playhouses, dancing on real ice with ice skates, and to this end he began the work of designing an artificial rink which has been constructed by the Remington Machine Company.

The apparatus consists of a shallow tank 8 x 16 feet, with ammonia coils and pipes at the bottom, together with the necessary ice-making machinery. The tank, which really resembles a platform more than anything else, is so constructed that it can be folded together after the ice has been removed, and it can be placed upon the stage of a playhouse and removed within a few seconds. It is a novelty in ice-making apparatus. It will be necessary for Reynolds to carry with him a refrigerating engineer and assistant to operate the ice-making machinery.

PURE FOOD LOGIC IN FEW WORDS.

The people who object to the presence of preservatives in food products have never yet been pinned down sufficiently helpless as to admit that the use of food products containing preservatives has done more good, saved more lives and added more to general health, than hardly any other practice, process or medicine that could be mentioned, but at least they should be candid enough to admit that without the food products so preserved human existence would not have been so good for many persons, it being understood that under certain common conditions the products must be preserved with preservatives or not at all, which means waste and the deprivation of many people in the matter of diet.—Merchants' Review.

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PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the bbl. except lard, which is quoted by the cwt. in tcs., pork and beef by the bbl. or tierce, and hogs by the cwt.

Large Hog Receipts at the Packing Points Do Not Materially Shake Up the Products Markets, Which, on the Whole, Have an Active Cash Trading and a Good Undertone—Very Little Change in the Prices Apprehended for the Near Future—A Liberal Hog Supply Needed for the Brisk Consumption in This Country and in Foreign Markets—Speculation of a Conservative Order.

The hog products markets do not get very materially away from the line of prices that they had held upon them for two or three weeks before. But it has not been generally apprehended that there would be changed prices of a marked order in the near future, or in the trading period this side of January, since the consumption of meats and lard in this country and Europe is of that liberal general character, while that a quick market is found for the general productions, that it would be difficult to see any reason for changed prices in the showing at least of cash demands, while that as it would be impossible to get the prices of hogs more than moderately lower that the products markets were not likely to be handled imprudently for any marked pressure upon the marketing of hogs.

Besides, if the hog prices were forced, as they could be forced temporarily, upon a little easier trading basis than that existing there would undoubtedly follow more conservative shipments forward of hogs, by which a reaction in their prices would at once take place. Moreover, under the necessity of getting steadily a full supply of hogs at the packing points in order to meet the current good cash demands for the products it is improbable that hog prices will be materially modified, and therefore that the prod-

ucts markets are likely to rest upon a fairly secure basis of prices, with probabilities that after a few weeks that they will be taken hold of for an advance on their merits through statistical positions.

The receipts of the hogs at the packing points have been of a large order for the week, although hardly more than the quantity of them had at the corresponding time last year; but the necessary demands for the hogs as through the brisk consumption of the products has prevented more than occasional and small declines in their prices, while that any concessions in the prices for the hogs have been quickly recovered in face of the almost steady liberal arrivals of them.

There is no doubt that a liberal supply of good medium average and light hogs is back in the country, and more of the heavy weights held there than the trade had apprehended there would be at this time of the packing season; but whatever the extent of the hogs to come forward for the next few weeks at least, they will all be needed, under the prospects of consumers' needs everywhere in that time, particularly those wants as shown upon many of the more important foreign markets, while that a steady falling away of the stocks at the packing points, despite the late largely increased packing, of most of the more important products, but particularly of lard, pork and short ribs, emphasizes the situation as favorable to the selling interests from the statistical standpoint.

Estimated Chicago stock, 27,000 bbls. pork (30,800 bbls. Nov. 1); 22,000 tcs. lard (52,300 tcs. Nov. 1); 8,500,000 lbs. ribs (12,184,000 lbs. Nov. 1).

Of course, Europe gets to killing in a few weeks in a general way its own hog supply,

but it must be considered that there is a markedly insufficient supply of livestock in Europe, that the prices for it are, in most sections, materially higher than those in this country, and that as trade conditions are generally of a satisfactory order in Europe that the consumption of meats is larger than usual, and that it must be steadily freely met by demands upon this country for supplies of them, and that it will require a long while for Europe to recover a normal footing upon the supply question, after the sharp deficiency it had from the previous year's drouth effects and its active consumption. It is likely to be at least well along to the spring months before everything in the meat, and fat lines are held in Europe in normal volume.

Therefore, whether the shipments of the hog products to Europe are in the way of demands or consignments, the fact that they are made in a large way and that they are well taken care of on the other side, emphasizes the near future situation and points to a feeling of decided security as to prices.

The later developments of the products markets depend a good deal upon the effects of the large corn crop in furnishing heavy weight hogs, as it is conceded that there is a pretty full supply of hogs for the season's packing.

But it now looks as if it is very doubtful that a large accumulated stock of the products could be made from the winter packing, as everything points to a pretty rapid absorption of them for some weeks to come, particularly by Europe; and, therefore, from at least the statistical positions that the products markets would, for the season, more than now favor the selling interests.

The Chicago packers in their needs of cash

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TALLOW, STEARINE, GREASE and SOAP

WEEKLY REVIEW

TALLOW.—The markets over the country have a slacker look, more particularly for other than fine tallow, but they can hardly be called upon an easier trading basis than in the previous week, although that sales of large lots would now be more difficult except at prices rather more in the buyer's favor than those of the week before, but more particularly for the undergrades.

There is so much more of the usual collection of fat going to the make of the oleo oils, that hardly enough strictly fine tallow is being produced for ordinary needs of it, and therefore that there is no anxiety in selling it. But of the good grades and the under qualities of the tallow there is a supply growing which makes market conditions for them sensitive to the slightest adverse influence.

And the adverse influence for the week has been a further weakening of the foreign markets, with the London sale on Wednesday showing unchanged prices to 6d. decline, and where 200 casks were sold out of 900 or 1,000 casks offered, as shown by two cables.

It is not claimed that there has been latterly any very marked export demand for the tallow, but that unquestionably there has been some trade hope that there would be export demand for it, while that the course of the foreign markets has been watched with a good deal of interest as to the possibilities of it.

The fact that the cables were quiet in the previous week had led to more reserved buying of the tallow on the part of the large western soapmakers in the previous week and the added weakness of the foreign markets this week makes them even more indifferent as buyers.

This is permitting the making of an accumulation of tallow supplies, while that if the demand continues of the late sluggish order that the advantage as to prices is likely to be more in favor of the buyers for other than the better grades of the tallow.

Nevertheless, there was a sale, this week, of 100 hhds. New York city tallow at 4½c. for export, although that more of it could be had at 4½c., and afterwards 100 hhds. more sold to home soapmakers at 4½c.

When it comes to considering the market situation for the fine tallow, and as outside of the favorable influence upon the prices for it of a moderate production of that class of goods, and by reason of the diversion of fat supplies to the make of oleo oils, it is

found that the fine tallow is wanted for edible purposes close to its supplies upon the market, and by reason of a very good sale for compound lard and for other home purposes, and that the general consumption for edible purposes is encouraged by the good undertone of the lard market, and the larger than usual consumption of pure lard upon the foreign markets, by which the home consumption of the compound lard is necessarily enlarged. Besides that there are steady wants of this fine tallow by some of the soapmakers, and insufficient supplies of it.

The fact that the cotton oil market has advanced this week in a substantial way has no influence upon the tallow markets, and very little upon the grease markets, except to make the latter a trifle firmer.

There is only a moderate offering of the city hhd. tallow upon the market, and for the city, in tiers, it would be impossible to buy it under 4½c., and perhaps for not less than 5c., which latter is the asking price.

The edible tallow ranges from 5½@6c., according to views of the holders of it, yet one or two lots were to be had at 5½c., and there was difficulty in finding buyers, although there are altogether very moderate offering of supplies of either the city or country made, as the fat usually taken for its make is going to the make of oleo oil.

For kettle, when buyers are willing to pay 5½@5½c. for that grade of country made tallow it is, as the color and fatty acid test suits them, and some of the users of that class of goods would just as lieve have them even if it was possible to find an edible grade at only ¼c. more money than those prices. Indeed more of the nice kettle tallow at 5½@5½c. could be marketed.

There is no trouble found in selling the nice grades of country made tallow upon the New York market; but the tallow supplies are mostly of qualities that do not come up to the fine quality needed, and these are showing some irregularity in prices, as there is no urgent demand for them. Sales of 275,000 pounds country made at 4½@5c. as to quality, and 5½@5½c. and even more for nice kettle.

(Continued on page 42.)

OLEO STEARINE.—The market has slackened a little, and is about ¼c. lower, with a little more of a business at the inside prices, yet, at the same time, a disposition shown by the compound makers not to ma-

terially exceed near needs in wants of supplies, although that the compound lard business is of very fair volume and that the undertone of the pure lard market is encouraging for continued life to the compound lard business. There have been sales of 50,000 pounds, to go out of town, at 7½c., and 150,000 pounds city made at 7½c. The West is quiet and is quoted nominal at 7½c.

LARD STEARINE.—The lard refiners are moderate buyers and there is an occasional export demand. Quotations are 8½c.

OLEO OIL.—Consumption is steadily liberal upon the Dutch markets, and there is no marked additional accumulation of choice oils, the production of which is of normal volume. New York at 10½c. for choice, 9c. for prime, and 7½c. for low grade. Rotterdam quoted at 60 florins.

GREASE STEARINE.—Export inquiry is light and the market does not vary materially. Yellow quoted at 4½@4½c., white at 5½c.

GREASE.—The decidedly higher priced cottonseed oil than latterly, and which brings it close to the price of some grades of the grease, is helping the grease market in an increased sale of it to soapmakers. Yellow quoted at 3½@4½c.; bone at 4½@4½c., and choice, 4½@4½c.; house at 4@4½c.; choice white at 5c., and "B" white at 4½c.

CORN OIL.—The export interest is moderate, although the general tone of the market is improved with the higher priced cotton oil. Quoted at \$3.55@3.70.

COTTONSEED STEARINE.—There are steady movements to the foreign markets and a firm line of prices. Quoted at 33@34c. per gallon.

NEATSFOOL OIL.—The supplies are moving out to a fair extent in jobbing quantities and at steady prices. Quotations are for 20 test, 90c.; 40 test at 60c., and prime at 48c. and 30 test at 80c.

LARD OIL.—There is a fairly active jobbing business and a firm market. Prime quoted at 61@63c.

COCOANUT OIL.—The market is sustained to firm prices, since there is little excess of supply for sale, as arrivals are almost steadily chiefly sold up ahead. Cochin quoted 8¼@8½c., spot, and 7¼@7½c. for October and November shipments, and 7½@7¼c. for later shipments. Ceylon at 6½@6½c. spot, and shipments at 6¼c.

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(Continued from page 16.)

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Stencils.
Squeegees.
Brushes.
Trucks.
Barrows.
Butter Paddles.

*Power required.

(To be continued.)

(Readers noticing any omissions will confer a favor by informing the editor.)

CENTRIFUGAL PUMPS.

(Concluded from page 23.)

ates both these disadvantages and can now be built for all heads up to 2,000 feet. A multiple stage pump is primarily a series of single stage pumps mounted side by side and with runners driven by a single shaft. The liquid passes through each in succession, receiving its proportionate increment of pressure at each "stage." Practically the several single pumps are incorporated in one casting with water ways arranged so as to lead the water from the periphery of one runner to the inlet of the other with the least possible loss.

The use of high pressures and velocities in pumps of this nature has necessitated careful design of impellers, so that there shall be no unbalanced forces to be taken up at wearing surfaces. The manufacturers of certain pumps claim a perfectly balanced impeller with no resultant end thrust under all conditions of service. Illustrated herewith is a four stage pump which showed, under test, an efficiency

of 72 per cent. when delivering 250 gallons of water per minute against a head of 650 feet.

Among other improvements in centrifugal pump design has come a reduction in the speed so that they become readily adapted for direct connection to high speed engines. Thus a most compact and effective unit is provided with a capacity far exceeding a direct acting pump of the same weight. Illustrations are given of two pumps of this type, one driven by a double enclosed engine and the other by a single engine.

For general service the centrifugal pump seems a well-nigh ideal piece of apparatus. Commercially considered its first cost is low, its maintenance expense a minimum, and its effective life a long one. Its operation is too simple to require skilled attendance, and its property of handling liquids of a corrosive nature and containing large quantities of solid matter in suspension renders it indispensable for certain situations. Their high maintained efficiency, quiet operation, absence of heavy foundations with no danger in stopping and starting under full water pressure are unmistakable advantages pointing to a widespread use in the future.

The chief disadvantage of the centrifugal pump is its inability to prime or start itself, and unless it is so situated as to be submerged or have water enter the pump at a slight head, some device is necessary to prime them. This may be effected either by filling the shell with water from a tap to water

mains, or by an ejector where steam pressure is available, or by a hand pump, as shown in the accompanying cut. On the score of fuel economy the centrifugal cannot compete with the high duty pumping engine. As the centrifugal does not include in itself the element of a prime mover, such a comparison is manifestly unfair. The direct acting pump analogous to the centrifugal is the triplex power pump, and in the relative economies of these two the centrifugal is claimed to be markedly superior.

Much matter of practical interest on this subject will be found in the latest publication of the Buffalo Steam Pump Company, Buffalo, N. Y., from which the above is largely drawn. While it is too expensively gotten up for general distribution, an arrangement has been made by which copies will be forwarded to interested readers if mention is made of The National Provisioner.

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The B. F. Sturtevant Company, of Boston, Mass., has just sold for export to Porto Rico a complete forced draft equipment for burning bagasse, the refuse sugar cane which is there extensively used for fuel.

Are you a packinghouse man in search of a good job at the right salary? Watch page 48.

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COTTONSEED OIL

WEEKLY REVIEW

THE NATIONAL PROVISIONER is an official organ of the Interstate Cottonseed Crushers' Association, and the official organ of the Oil Mill Superintendents' Association of the United States.

Reaction to Substantially Higher Prices Based Largely Upon the Cotton Growers' Report—Followed by Moderate Reactions to Easier Prices—A Speculative Market Essentially Based Upon Cotton Crop News—Conservative Export Demands and Reserved Buying of the Compound Makers.

As the cottonseed oil market is now essentially a development from the cotton crop news, and that it has little in the way of demands for actual supplies to sustain it to the outside prices, it would be well to give the late cotton ginners' report by comparison with the ginners' report of the previous years before entering into details concerning the cotton oil market itself.

The ginners' report, which was received in the afternoon of Tuesday last, was the direct cause of a substantial advance almost at once of about $\frac{1}{2}$ to $\frac{3}{4}$ c. per gallon in the oil market, while that upon the following day, there was a further decided advance in prices of quite as much, and bringing the market to the best figures of the fall season, more particularly for the refined oil in New York, while that it hardened all of the southern markets and made at least a decided advance for the crude oil at the mills, where there was much more of a reserved disposition to sell.

But it looked to us at the close of Wednesday's market as if the speculative temper had exhausted all of the cotton crop news as a factor for a bulging cotton oil market, and that it would soon begin to take into consideration the fact that there are now prostrated export and other demands and because of the late advanced prices. Indeed, it looked on Wednesday as if there was a good deal of a desire here and there to take advantage of the prices and to sell as freely as possible, and by which at the close of the day

there was a reaction to $\frac{1}{4}$ c. lower prices, and this was followed, on Thursday, by an additionally tame situation with, however, little further change in prices.

There had been on Monday slightly firmer oil market, as a continued reaction, natural, from the depression of early the week before.

A moderately stronger oil market was counted upon as a reaction from the decline that had been made up to the close of trading of Wednesday in the week before.

But the further advance from Tuesday of this week, in Wednesday's trading, and the extremely sensitive condition of the market, was the outcome of ideas concerning the cotton crop, and as they were based, as before remarked, upon the cotton ginners' report.

The ginners' report showed that the cotton ginned up to November 14 was 7,498,167 bales, as against some trade expectations that had been held of about 8,000,000 bales as likely to be the figures, and which promised a cotton crop, as the trade, in rather a general way, was inclined to look upon it, of about 10,500,000 bales.

The cotton that had been ginned to November 14, in the previous year, was 9,786,646 bales, and in 1903, for the same time, 6,815,162 bales. The total crop in 1904 was 13,451,337 bales, and in 1903, 9,819,969 bales.

Some of the figures from the various states of the ginning, showed the very marked loss of the crop, as compared with the previous year, as follows: Cotton ginned this year to November 14, in Texas, 1,822,942 bales, compares with 2,653,203 bales, in Texas, same time last year; Arkansas, 313,164 bales, against 556,023 bales, last year; Indian Territory, 183,550 bales, against 312,208 bales, same time last year; Mississippi, 664,170 bales, against 1,031,644 bales, same time last year. In the Southeast, the proportion of the crop ginned holds up better than that in

the Southwest, thus, in Alabama 942,918 bales had been ginned to November 14, against 1,065,438 bales, same time in the previous year; in Georgia, 1,437,091 bales and 1,540,749 bales, respectively; in North Carolina, 510,124 bales and 519,427 bales, respectively; in South Carolina, 914,772 bales and 930,713 bales, respectively.

The ginners' report seems to back up some of the estimates of the cotton crop made in our report of the previous week, from which we outlined the general features of the oil market.

Thus we said in our previous week's review that there had been some tall estimates of the cotton crop by an English authority, and that in our opinion, "there is no such in extent cotton crop as the English source estimates of it, or 11,500,000 bales, and that we hold the opinion that it is about 10,500,000 bales, yet that there is no question but that any estimate put out concerning the cotton crop has more or less influence, and that it must be referred to as a market factor. Besides that it strikes us that the people with 11,000,000 bales to 11,500,000 bales, ideas concerning the cotton crop are estimating materially too high for the Southwest yields, particularly for the yield in Texas, and that even admitting that the Southeast sections will turn out as much cotton as they apprehend they will, we cannot figure a crop of more than 10,500,000 bales."

Whatever the clearer than before ideas that may be had concerning the extent of the cotton crop, it is not, of course, as yet, absolutely determined that the cotton crop is a 10,500,000 bale one, or even less than that. Yet that it is exceedingly doubtful that it is more than 10,500,000 bales and from which the opinion is becoming fastened that the oil production could not be anywhere near as large a one as that had in the previous year, from the size of the cotton crop alone, and

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that the oil production is, as well, likely to be modified in some degree by the several weeks before the last couple of weeks disproportionate prices of the seed and the seed products markets, which made in some sections cautious buying of seed supplies for oil productions.

We think, however, as we said last week, that the oil productions in Georgia, Alabama and the Carolinas will be of normal volume as excluding the consideration of the exceptionally large production of last year, and that the loss of oil productions this season will be chiefly in the Southwest, and notably in Texas, Mississippi, Arkansas and Louisiana.

It is not contended, however, that the diminished oil productions for the season, as compared with those of last year, will have more than moderate effect, for the long run, upon prices in the sellers favor, and because of the considerable supplies of the old oil that were carried over into this season, and which have entered and will further moderately enter, this season as a factor to meet demands from exporters and home markets; therefore, that these supplies will, necessarily work, in a considerable degree, against effects from the probable modified oil production of this season, particularly as the wants of the oil from the foreign markets this season will be materially less than those of the previous year.

The further the season is advanced the greater the improbability of an active export business in it, and because that oil prices are not only now too high for a liberal export trading, but because it is becoming apparent that the foreign markets are likely to have very fair supplies of some of the competing soap oils, notably of Sesame, and that while nothing definite can be learned, as yet, concerning the Arichides oil supplies, yet that the prospects of a good marketable quantity of them are becoming brighter, while that the olive oil supply is not likely to be a materially short one, except in Spain. Besides that by reason of the enormous foreign crops of linseed of two years ago, and the fair average supply of it in the last year, by which a good supply of the oil is yet available upon the foreign markets for use of the soapmakers, and that the Argentine reports of its linseed supply for the coming season are more favorable than before latterly, it would seem that however the linseed markets may recover in Europe from a season of exceptionally low prices, that there would be plenty of the linseed at a price for effective competition against high priced cotton oil.

It is, however, only in the export trading that we look to see any reduction of business in cotton oil, while that this loss of trading will happen only in the soap grades of the cotton oil, since we think that the lard market is not only now, but likely to be favorably situated, to influence a good season's business in edible grades of the cotton oil, however dull the trading in them is at present.

Besides that the Rotterdam market is likely to buy the cotton oil freely, since the oleo oil keeps at a high price, while that the production of the oleo oil is insufficient for the present and prospective needs for use in the make of butterine upon the Dutch market.

As concerns the home consumption of the cotton oil, it is now not only larger than it

was last year, at this time, or for the fall season, by the compound makers, but it is likely to be slightly more through the year than the enormous volume of it through the previous season, and because of the larger than usual needs of Europe of pure lard, from its short fat supplies, to which we have alluded in former reviews more specifically than is now necessary, and by which the lard market is likely to be held to a price favorably to affect the home consumption of compound lard, and necessarily the use of cotton oil.

It is doubtful, however, if the home soap-makers more freely use the cotton oil than they did in the last year, since their consumption of the oil then was of an exceptionally liberal order. But all other home uses of cotton oil steadily grow, each season, such as those for bakers' use, edible purposes, etc., and it is safe to indulge in the belief that the home consumption of the cotton oil will be a moderately larger one than that of the previous year, but that in an all around way as covering the probability of a material less export business for the season than that of the previous year, that less cotton oil will be used this season than was used in the previous year; and that this will have to be taken into consideration in the figuring at present of a less for this season than last year of the oil production, and particularly as it is considered that a good deal of old oil has been carried over to make up, in a degree, any falling off of this year's production.

It is with opinions, as outlined, that it looks to us as if there would be some reaction in the prices made latterly for cotton oil, and that the late advance in the market for cotton oil, however that it has been based largely upon sentiment from the cotton news and from speculation, could hardly be held at this season of the year, and particularly as it has cut off important export demand and made very cautious buying on the part of the home consumers of the cotton oil.

The speculative trading in New York has been more to protect contracts, and is much more moderate than before latterly on new demands for investment, since the speculator while, however, he may be moved by the cotton crop news, looks with suspicion upon a market that has had substantial elements of life taken from it, notably in the dragging export business and which had been occasioned by the recent advanced prices for the oil.

The mills are getting very few new bids for crude oil, as the refiners on the at present slow sale for the refined oil to home consumers and exporters, and the fair supplies of it held by them, are disposed to wait before buying the crude oil until the market situation is of a more definite character. Some few sales of the crude, however, have been made at advanced prices.

While the mills are inclined to ask more money for the crude oil, because of the late higher situation of the seaboard markets, for the refined, they are not getting bids for large lots at the higher prices they are asking, although some few small lots have been sold by them at one cent better prices for the week.

New York Transactions.

The trading upon the closing day of the previous week was slow, with prices a trifle

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Boreas, Prime Winter Yellow
Venus, Prime Summer White*

*Marigold Cooking Oil
Puritan Salad Oil
Jersey Butter Oil*

*Cable Address
Procter, Cincinnati, U. S. A.*

*Office, CINCINNATI, O.
Refinery, IVORYDALE, O.*

easier; prices last Saturday were for prime yellow; November, 27¼@28c. (bid and asked); December at 27¼@28c.; January, at 27½@28c.; March, at 28@28¼c.; May, at 28½@28¾c. Sales of 600 bbls. prime yellow, May, at 28¾c.

On Monday the market opened firm and closed ¼c. higher on deliveries after December, and unchanged on the nearer months. Sales of 1,100 bbls. prime yellow, March, at 28¾c.; 1,500 bbls. do., May, at 29c.; 800 bbls. do. at 29¼c.; "call" prices: November at 27¼@28c.; December at 27¼@28c., and 27½@28c.; January at 27½@28¼c., and 27½@28½c.; March at 28@28¾c., and 28½@29c.; May at 28¾@29c., and 29@29½c.

On Tuesday the market opened firmer, with the early deliveries ¼@½c. higher, and the late months practically as they closed the night before, and in the afternoon, after the receipt of the cotton ginners' report, the oil market advanced about ¼c. Sales, 100 bbls. prime yellow, January, at 28½c.; 100 bbls. do. at 29c.; 800 bbls. May, at 29¼c.; 100 do. at 29¾c.; 2,200 do. at 30c.; 100 bbls. March, 29¾c.; "call" prices: November at 27½@28½c., and 28@29c.; December at 28@28½c., and 28½@29¼c.; January at 28¼@28¾c., and 28½@29½c.; March at 28½@29c., and 29@29½c.; May at 29@29½c., and 29½@30c.

On Wednesday the market opened excited with a further advance in the prices of ½@1c. per gallon, but closed slacker. Sales, 200 bbls. prime yellow March, 30c.; 700 do. at 29¾c.; 700 bbls. do January, 29½c.; 1,000 bbls. do., 29¼c.; 100 bbls. do. at 29c., closing at 29c. bid; 100 bbls. May, 30¼c.; 2,300 bbls. May at 30½c.; 200 do. at 30c., closing 30c. bid; "call" prices: November, 29@30c., and 28¾@30c.; December, 29¼@30c., and 29@30c.; January, 29½@29¾c., and 29@29½c.; March, 29½@30c.; May, 30¼@30½c.; and the indicated decline occurring thereafter.

On Thursday the market opened steady at the ½c. decline of the day before, but was quiet, and afterwards was slightly easier. Sales, 700 bbls. prime yellow, January, 29c.; 700 bbls. May, 30c.; 200 do., 29¾c.; 200 bbls. December, 29c. "Call" prices: November, 28½@29½c., and 28½@29¼c.; December, 28½@29½c., and 28½@29¼c.; January, 29@29½c.; March, 29½c.; May, 30@30½c., and 29¾@30¼c.

(Continued on page 42.)

Export Demands.

There has been so little done for export because of the higher prices prevailing lately, that the market is in a more or less nominal position, particularly for the edible grades, and which latter are quoted at 31@32c.

Compound Makers' Demands.

There is a slow market, this week, with the compound makers, who, although they are doing a good business in compound lard, are careful buyers of the cotton oil with its irregular market situation. The bleaching grade, in tanks, at the West, is quoted nominally 26½c.

At the Mills.

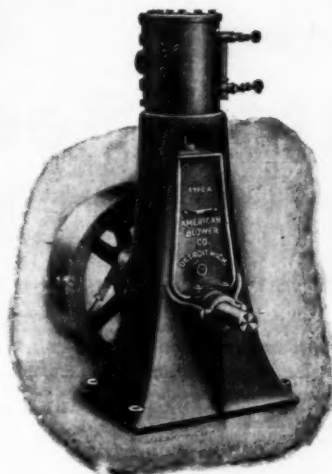
The firmer holding of the mills with indifferent demands for supplies, makes the market for crude oil an irregular one for the present, with 21½c. bid in the southeast and 22c. asked, and small sales at 22c. and 22c. quoted in Texas, and 22½c. bid in the Valley.

COTTONSEED OIL SITUATION.

(Special Letter to the National Provisioner from Aspegren & Co.)

New York, Nov. 23.—The downward tendency in the market mentioned in our last market letter of November 16 saw its end and the lowest prices were reached on that day. Since that time the market has been gradually creeping up again, and yesterday it was up again to the highest point reached this season. May selling freely at 30½c. At the close of yesterday's trading there were, however, signs of a reaction, and to-day we must quote the market fully ½c. off. Outside of the rather bullish ginners' report published on November 21, there is very little change to report in conditions that affect the

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ATLANTA

LONDON

Doesn't sound reasonable in connection with a piece of machinery, but the annual saving in cost of operating our Type A Engines over others of similar rating, figures out that way. Isn't your curiosity sufficiently aroused to prompt you to ask for circular No. 185Z, explaining this? All facts—no fancy theories.

American Blower Company

DETROIT, MICH.

market. Crude oil prices have continued just about the same and without any change of importance notwithstanding the fluctuations in the market for refined. In Texas sales are being made at from 23½@24c.; in the southeast 22@22½c. is asked and in the Carolinas sales have been made at from 21c. for prompt to 22c. for January. Compared to such prices for crude, refined oil is still comparatively too low.

The export demand from Europe still continues very small, and hardly anything to speak of. Produce Exchange prices at 3:30 o'clock to-day were as follows: Prime summer yellow cottonseed oil, November, 28½c. bid, 29s. asked; December, 28¾c. bid, 29¼c. asked; January, 29c. bid, 29¼c. asked; March, 29¾c. bid, 30c. asked; May, 30c. bid, 30¼c. asked. We further quote: Prime winter yellow cottonseed oil, 31@31½c.; prime summer white cottonseed oil, 31@31½c.

SOUTHERN MARKETS

Atlanta.

(Special Wire to The National Provisioner.)

Atlanta, Ga., Nov. 23.—Prime crude oil 22c. f. o. b. mills; sellers holding for higher prices. Prime meal in good demand at \$22.25 f. o. b. mill. Hulls firmer at \$4.50@4.75, Atlanta, loose.

New Orleans.

(Special Wire to The National Provisioner.)

New Orleans, La., Nov. 23.—Crude oil steady at 22c. for Valley; very little offering; Texas refined is in light demand. Cake and meal higher at \$28.37½ long ton, ship's side, New Orleans. Hulls are unchanged.

Dallas.

(Special Wire to The National Provisioner.)

Dallas, Tex., Nov. 23.—Oil market stronger, with good demand and sales at 24c. Meal steady; \$26 bid per short ton, f. o. b., Galveston.

Memphis.

(Special Wire to The National Provisioner.)

Memphis, Tenn., Nov. 23.—Oil market dull; prime crude 22½@23c. Prime meal higher and firm at \$23.25@23.50. Hulls in better demand at \$3.75@4, loose.

Kansas City.

(Special Wire to The National Provisioner.)

Kansas City, Nov. 23.—Oil market unsettled; prime crude sold down to 22c. for best. Market now excited, and oil is held at 24@25c. f. o. b. mills in the Southwest; 23½c. bid.

COTTONSEED OIL EXPORTS

Exports of cottonseed oil for the week ending Nov. 23, 1905, for the period since September 1, 1905, and for the similar period in 1904, were as follows:

From New York.

Port.	For week. 1, 1905.	Since Sept. 1, 1905.	Same period 1904.
Bbls.	Bbls.	Bbls.	Bbls.
Aalesund, Norway	—	50	—
Aberdeen, Scotland	—	90	—
Acajutla, Salvador	—	8	25
Adelaide, Australia	—	—	83
Alexandria, Egypt	421	1,376	920
Algiers, Algeria	—	1,728	2,008
Algoa Bay, Cape Colony	66	83	—
Ancona, Italy	—	125	175
Antigua, West Indies	421	514	76
Antwerp, Belgium	145	3,970	478
Asuncion, Venezuela	—	49	—
Auckland, New Zealand	19	46	35
Bahia, Brazil	—	239	—
Barbadoes, West Indies	—	284	140
Barcelona, Spain	—	50	—
Belfast, Ireland	—	58	—
Bergen, Norway	—	100	100
Bone, Algeria	—	81	—
Bordeaux, France	—	1,110	550
Braila, Roumania	—	175	—
Bremen, Germany	—	150	—
Bridgeton, W. I.	—	—	87
Bristol, England	—	—	10
Buenos Ayres, Argentine Repub. ..	—	988	614
Calbarien, Cuba	—	36	—
Callao, Peru	—	90	—
Cairo, Egypt	—	90	—
Cape Town, Cape Colony	—	803	125
Cardenas, Cuba	9	36	—
Cardiff, Wales	—	25	10
Cartagena, Colombia	—	3	—
Cayenne, French Guiana	—	99	81
Christiania, Norway	—	990	161
Christiansund, Norway	—	25	26
Cienfuegos, Cuba	—	28	—
Ciudad Bolivar, Venezuela	6	27	—
Colon, Panama	33	201	116
Conakry, Africa	—	112	15
Copenhagen, Denmark	—	195	1,125
Corinto, Nicaragua	6	36	28
Curacao, Leeward Islands	—	24	—
Dantzig, Germany	250	1,060	1,300
Delagoa Bay, East Africa	—	—	21
Demarara, British Guiana	—	523	288
Drontheim, Norway	—	25	—
Dublin, Ireland	—	360	290
East London, Cape Colony	—	—	115
Flume, Austria	—	50	—
Fort de France, W. I.	—	—	589
Freemantle, Australia	—	—	58
Galatz, Roumania	—	1,215	450
Genoa, Italy	1,885	4,155	10,160
Georgetown, British Guiana	—	—	74
Gibraltar, Spain	—	780	150
Glasgow, Scotland	27	2,752	209
Gothenburg, Sweden	—	895	579
Guadeloupe, W. I.	—	—	494
Guantanamo, Cuba	9	22	—
Guayaquil, Ecuador	—	59	—
Hamburg, Germany	—	1,210	1,657
Havana, Cuba	106	1,002	399
Havre, France	500	6,548	6,486
Heleingsfors, Finland	—	59	—
Hong Kong, China	—	—	54
Hull, England	—	55	175

ASPEGREN & CO.

Produce Exchange

NEW YORK CITY

EXPORTERS

BROKERS

**WE EXECUTE
ORDERS
TO BUY OR SELL**

Cotton Seed Oil

**ON THE N. Y.
PRODUCE
EXCHANGE FOR**

FUTURE DELIVERY

Write to us for particulars. Will wire you the daily closing prices upon request.

Kingston, West Indies.....	86	904	709
Kobe, Japan.....	—	907	—
Konigsberg, Germany.....	—	300	—
Kustendji, Roumania.....	—	75	—
La Guaira, Venezuela.....	20	31	489
Leghorn, Italy.....	—	557	1,034
Leith, Scotland.....	—	70	—
Lisbon, Spain.....	—	20	—
Liverpool, England.....	225	1,643	1,142
London, England.....	90	892	355
Macoris, San Domingo.....	—	395	570
Malmo, Norway.....	—	13	6
Malta, Island of.....	—	899	658
Manchester, England.....	—	375	110
Manaos, Brazil.....	—	15	—
Manzanilla, Cuba.....	—	29	—
Marseilles, France.....	50	12,045	3,040
Martinique, West Indies.....	400	1,135	377
Massowah, Eritret.....	—	221	19
Matanzas, West Indies.....	—	6	10
Melbourne, Australia.....	—	159	193
Montego Bay, West Indies.....	13	13	—
Montevideo, Uruguay.....	213	784	1,873
Naples, Italy.....	—	322	1,100
Oran, Algeria.....	—	50	1,706
Pernambuco, Brazil.....	—	142	—
Point a Petre, West Indies.....	—	692	—
Port Antonio, Jamaica.....	—	70	—
Port au Prince, West Indies.....	—	6	5
Port Limon, Costa Rica.....	5	5	6
Port Natal, Cape Colony.....	—	—	56
Port Cabello, Venezuela.....	—	—	7
Port of Spain, West Indies.....	—	—	25
Progresso, Mexico.....	—	127	—
Rio Janeiro, Brazil.....	—	1,393	1,101
Rotterdam, Holland.....	300	4,365	2,205
St. Kitts, West Indies.....	—	—	264
St. Thomas, W. I.....	—	11	8
San Domingo City, San Domingo.....	—	411	—
Santiago, Cuba.....	9	50	24
Santos, Brazil.....	—	177	162
Sekondi.....	—	10	—
Sierra Leone, Africa.....	—	—	21
Southampton, England.....	200	300	400
Stavanger, Norway.....	—	109	140
Stettin, Germany.....	100	1,485	1,525
Stockholm, Sweden.....	50	260	265
Swansea, Wales.....	25	25	—
Sydney, Australia.....	—	9	468
Tangiers, Morocco.....	—	488	—
Trieste, Austria.....	—	13,120	6,519
Trinidad, Island of.....	9	97	708
Tunis, Algeria.....	—	9	16
Turks Island.....	—	—	—
Valparaiso, Chile.....	—	288	686
Velle, Denmark.....	—	—	100
Venice, Italy.....	—	2,025	8,215
Vera Cruz, Mexico.....	—	132	46
Wellington, New Zealand.....	—	29	—
Total.....	5,098	81,890	67,229

From New Orleans.

Antwerp, Belgium.....	—	3,275	1,659
Belfast, Ireland.....	—	100	250
Bremen, Germany.....	—	1,440	608
Copenhagen, Denmark.....	800	1,150	835
Genoa, Italy.....	—	—	100
Glasgow, Scotland.....	—	475	1,636
Hamburg, Germany.....	—	5,635	4,428
Havana, Cuba.....	200	407	90
Havre, France.....	1,650	1,725	250
Liverpool, England.....	—	2,085	800
London, England.....	—	2,250	869
Marseilles, France.....	—	300	2,825
Mexico.....	—	223	—
Rotterdam, Holland.....	5,350	10,632	19,125
Trieste, Austria.....	—	550	7,234
Total.....	8,000	50,247	49,851

From Galveston.

Antwerp, Belgium.....	—	—	2,080
Hamburg, Germany.....	1,000	1,000	80
Rotterdam, Holland.....	—	3,600	11,858
Tampico, Mexico.....	—	100	—
Trieste, Austria.....	—	1,100	50
Vera Cruz, Mexico.....	—	—	3,300
Total.....	1,000	5,800	17,368

From Baltimore.

Antwerp, Belgium.....	—	100	250
Bremerhaven, Germany.....	—	—	260
Glasgow, Scotland.....	170	170	—
Hamburg, Germany.....	1,090	1,360	100
Rotterdam, Holland.....	—	400	1,750
Stettin, Germany.....	—	—	530
Total.....	1,230	2,090	2,870

From Philadelphia.

Hamburg, Germany.....	—	110	—
Rotterdam, Holland.....	—	—	3,216
Total.....	—	110	3,216

*Not given.

From Savannah.

Gothenberg, Sweden.....	—	637	—
Rotterdam, Holland.....	—	8,900	—
Total.....	—	9,537	—

*Not given.

From Newport News.

Hamburg, Germany.....	—	910	4,804
Liverpool, England.....	—	—	100
London, England.....	—	—	100
Rotterdam, Holland.....	800	1,470	3,309
Total.....	800	2,380	8,311

From All Other Ports.

Canada.....	930	3,591	3,433
Guatemala.....	—	6	—
Honduras.....	—	1	—
Liverpool, England.....	—	—	21
Mexico.....	—	2	—
Salvador.....	—	32	—
Total.....	930	3,632	3,454

Recapitulation.

From New York.....	5,098	81,890	67,229
From New Orleans.....	8,000	50,247	49,851
From Galveston.....	1,000	5,800	17,368
From Baltimore.....	1,230	2,090	2,870
From Philadelphia.....	—	110	3,216
From Savannah.....	—	9,537	—
From Newport News.....	800	2,380	8,311
From all other ports.....	930	3,632	3,454
Total.....	17,757	135,725	143,069

*Not given.

CABLE MARKETS

Trieste.

(By Cable to The National Provisioner.)

Trieste, Nov. 24.—Cottonseed oil market is held higher but business is restrained by the advance. Quotations are for prime summer yellow at 46½@47 francs, and for winter at 49 francs.

Rotterdam.

(By Cable to The National Provisioner.)

Rotterdam, Nov. 24.—Cottonseed oil market is not active but is taken up moderately for consumption. Tone of market is stronger. Prime summer yellow quoted at 22½ florins, and off oil at 22¼ florins; butter oil at 23½ to 24 florins.

Antwerp.

(By Cable to The National Provisioner.)

Antwerp, Nov. 24.—Cottonseed oil market is held higher but is quiet. Off oil at about 45 francs.

Hamburg.

(By Cable to The National Provisioner.)

Hamburg, Nov. 24.—Cottonseed oil market is a little more active, but higher prices asked restricts some business. Quoted 37½ marks for off oil; quote prime summer yellow at 38½ marks and butter oil at 40½ marks.

Marseilles.

(By Cable to The National Provisioner.)

Marseilles, Nov. 24.—Cottonseed oil market is held at an advance, in sympathy with markets in America. Moderate activity, and is quoted at 45 francs for prime summer yellow, and at 49 francs for winter oil.

Liverpool.

(By Cable to The National Provisioner.)

Liverpool, Nov. 24.—Cottonseed oil market is quiet and firm; quoted nominal at 16s. 9d. @17s. for prime summer yellow, and at 16s. 9d. for off oil.

W. B. JOHNSON & CO.,
Merchandise Crokers
—AND DEALERS IN—
Cotton Seed Products
32 N. Front Street Memphis, Tenn.

Lombard Iron Works & Supply Company
AUGUSTA, GA.
Builders and Dealers in **ENGINEERS, BOILERS, Tanks, Stacks, Standpipes, etc.; Bridge and Architectural Iron Work; Railroad, Cotton, Saw, Fertilizer, Oil and Ice MACHINERY and Supplies and Repairs; Shafting, Pulleys, Hangers, Leather and Rubber Belting and Hose; MILL SUPPLIES and TOOLS; Foundry, Machine, Boiler and Bridge Work. Capacity for 800 hands.**

Southern Office and Works:
Norfolk, Va.

COTTON OIL & FIBRE CO.

Land Title Bldg :
Philadelphia, Pa.

Producers of

Crude and Refined Cotton Seed Oil, Cotton Seed Cake, Hulls, Mixed Hulls, Linters, Etc. Prime Cotton Seed Meal "Cofco" Brand.

Samples free on request Net 100 lbs. fully decorticated.

GUARANTEED ANALYSIS:

Ammonia, not less than 8.50 per cent. Nitrogen, not less than 7 per cent. Protein, not less than 45 per cent. Crude Oil and Fat, not less than 9 to 10 per cent.

HIDES AND SKINS

(Daily Hide and Leather Market.)

Chicago.

PACKER HIDES.—The market is not active, principally because there are but few hides being offered for shipment much before next January, and buyers are not disposed now to buy much ahead. While the market keeps dull and the tone is less bullish than formerly, there is no change in prices, and quotations are more or less nominal. Native steers are offered at 15¼c. for December and 15½c. for January salting, with no sales. Texas are nominal at 14¼c. for heavy and light and 13¾c. for extremes, 14c. for butt brands and 13¾c. for Colorados. There are still some November Colorados unsold, and most of the packers have December salting to offer, but buyers do not show interest at the asking price of 13¾c. It is reported that the recent sale of spread native steers at 16¼c. was with freight paid to Cleveland. Branded cows are still sold ahead, but quiet at present at 13¾c. The kill of native cows has been larger than was estimated, and two of the packers are offering their first half of December light cows at 14¼c., but are unable to secure this price owing to the somewhat weaker market on country cows. Heavy cows are sold too far ahead to admit of further business. Native bulls are nominal and branded bulls 10½ to 10¾c.

COUNTRY HIDES.—The market rules quiet but steady in the absence of further sales. There are only limited offerings, and although considerable talk is current concerning weakness, the market does not ease off to any great extent. Buffs are nominally quotable at 13½ to 13¾c., and some of the recent trading reported at 13¾c. has been to a big sole and harness leather tanner, who is short of hides. The fact that dealers were able to sell buff and heavy cows ahead at 13¾c. has caused them to be less anxious to secure future business. At the same time most of the large buyers are bearish in their views and state that they are unwilling to pay 13½c. for buff. Heavy cows are nominally quotable at 13½ to 13¾c. and extremes at 14¼ to 14½c. Heavy steers are quiet, but in limited supply and quotable at 14 to 14¼c., with choice lots held at 14½c. Branded steers and cows are unchanged at 12½c. flat and 13c. flat for Colorado packer take-off. The scarcity of bulls continues, and any buyer in urgent need for these would find it difficult to secure lots under 11½ and 10¾c.

NOTE.—The tannery at Grand Rapids, Mich., was destroyed by fire on Tuesday, but will be immediately rebuilt.

HORSE HIDES.—Some sales of horse hides have been made at \$3.90 for No. 1 selection.

CALFSKINS.—Chicago cities are considered strong at 16c., but no sales are being reported. Regular outside cities are firm at 15¾c., and countries at 15½c. Present receipt kips, which are beginning to run poorer in quality, are being offered to the extent of 2 cars at 14½c., but earlier stock is held at 15c. Deacons rule at 85c. and \$1.05 to \$1.07½. Packer slunks are quoted at 80c., and mostly sold ahead.

DRY HIDES.—A car of sole leather trimmed hides was sold at 22½c.

SHEEPSKINS.—The market continues active and shows increased strength. Nelson Morris & Co. have sold a car of sheep at \$1.57 as against their last selling price of \$1.52½. Extra heavy prime packer sheep are held at \$1.60 to \$1.65, Chicago lambs at \$1.42½ to \$1.45, and Western light sheep and lambs at \$1.30 to \$1.40. Country skins rule firm at \$1.20 to \$1.35 for fresh butcher lots.

LATER WIRE.—A large packer has sold 4 cars of Kansas City Texas hides at 14¾c. for heavy and light, and 13¾c. for extremes. The same packer has also sold his Chicago and Kansas City native bulls for the month of January at 11½c. One of the prominent packers is holding his next January native bulls at 11¾c.

New York.

DRY HIDES.—It is believed that about 3,000 Puerto Cabellos, etc., that arrived recently, were sold late to-day at the unchanged price of 24c.

CITY SLAUGHTER HIDES.—Some further sales have been made of butt brands and Colorados at 13½c., and two of the local packers are sold ahead on these into early December.

Leather.

The United States Leather Company have announced an advance of 1c. per pound on all grades and weights of dry and slaughter hide hemlock, union and oak sole. Buyers have not as yet taken hold at this increase, but they see no chance at present to buy leather at anything off from asking rates owing to the well-known fact that tanners have large orders booked and very small supplies on hand. "Camden" dry hide hemlock sole, which was formerly offered, as it runs, for 21½c. for overweight thirds and 24½c. for seconds, is now 22½c. for thirds and 25½c. for seconds. Jobbers' selections of overweight acid hemlock thirds are now held at 23c., rejects at 21c. and seconds at 26c. Last sales of B. and C. New York Texas oak sides were at 28c. and 27c., but B's are now held at 29c. and C's at 28c. A large local cutting concern recently bought 1,500 sides of "Newport" and the same quantity of "Hyndsman" Texas oak sides at former prices. It is quite generally believed throughout the trade that some definite action will be taken around the first of the year on the question of terms of discount.

PACKER EXPOSED SHAM WINE LIST.

Here is a story the Chicago Inter Ocean tells on a well-known packer—or rather, on a steamboat company operating boats between Chicago and Buffalo—for the joke was on the company, since the packer exposed the "fake" wine list on one of its boats. The Inter Ocean says:

On a certain boat running between here and

CARROLL S. PAGE, HYDE PARK, VT.

Green Calfskins, Country Hides, Sheep
Felts, Tallow, Bones.

Wool Puller and
Tallow
Renderer

Manufacturer of
Page's Perfected
Poultry Feed

Buffalo a most comprehensive wine card is laid before the prospective diner. It bubbles and overflows with the varieties of wine, and contains more dates and German names of rare vintages than one can find on six wine cards in Chicago. But beware of thinking that you can drink unlimited supplies of these wines. A leading packer found this out once, and the last time he sailed he played a mean trick on the company which left it wineless when the boat reached Buffalo.

Sitting at the table with his traveling companion, the packer began at the bottom of the card and ordered a bottle of Rudesheimer. The bottle was forthcoming and disposed of.

"That's good enough for me," said Mr. Packer to the waiter: "bring me another."

Very soon the waiter returned.

"I am sorry," he said, "but we haven't another bottle of that. We are just out. We are going to get some more in Buffalo."

"Very well," said Mr. Packer, with a twinkle in his eye, and his glance wandered up the wine list to the next name.

"Bring me some of this Findesberger, 1890."

The waiter bowed and disappeared, returning with the bottle, which was soon disposed of.

"Let's have another," said Mr. Packer. "Another bottle of the same."

The waiter went away and was gone a long time. Presently he returned with the head waiter.

"I am so sorry, Mr. Packer," the headwaiter apologized, "but we sold the last bottle of that Findesberger to you. We haven't another."

"Oh, very well," Mr. Packer said cheerfully, and he looked at the next wine. "Bring me a bottle of Aschenreuterheimer."

So the waiter did. He brought him a bottle of Aschenreuterheimer and that went the way of all good wines.

Well, Mr. Packer liked that and he ordered another bottle and there wasn't any more, so the steward said. So Mr. Packer tried the next wine with a like result, whereupon he and his friend retired for the night. In the morning the packer started again on his quest for information and discovered that a single bottle of each wine covered the wine list of the steamboat, and the rest of the passengers drank beer for the remainder of the journey, and muttered imprecations at Mr. Packer, the experimental.

HIDES UP!

after being salted with RETSOF CRUSHED ROCK SALT will bring more money on account of receiving a thorough, honest cure. No lime in RETSOF; just the pure salt supplied by Nature. We merely crush and screen to meet the requirements. The fact that RETSOF spreads evenly—being dry—causes the hide to be cured uniformly; the salt can be used several times, thus making it the most economical we know of.

That we are never too old to learn is exemplified by the following: A hide man who had used evaporated salt for many years was induced recently to put down a pack of 25 hides with RETSOF and a pack of same number with evaporated; when taken up the pack salted with RETSOF had increased in weight 34 lbs. more than the other pack.

If you are skeptical give RETSOF a similar trial, that is all we ask.

Address

INTERNATIONAL SALT CO.

SCRANTON, PENNA., or CHICAGO, ILLS

Country Butchers

Before Disposing of HIDES
and SKINS would do well
to Write for Prices to

U. S. Leather Co.

Country Hide Department,
E. J. SCHWARZ, Manager

Newark Branch,
Cor. Cross and Spring Sts.,
NEWARK, N. J.

Cleveland Branch,
Cor. James and Merwin Sts.,
CLEVELAND, OHIO.

Cumberland Branch,
CUMBERLAND, MD.



CHICAGO SECTION



Schwarzchild & Sulzberger will build a \$5,000 brick barn on 42nd street.

Sara Barnyard is here on another farewell tower, looking thinner'n ever.—Dramatic Note.

The Stock Yards is to have a tunnel connecting with downtown tubes for merchandise.

Want a position? Want any kind of second-hand machinery? Got any machinery to sell? See page 48.

Louis A. Howard & Company are remodeling their warehouse at the Yards to accommodate more material.

Tom Murray, Wm. Wyness and Billy Roberts are busy picking up the best cattle coming into the market.

Nelson Morris & Company gave \$1,000 to the fund for the relief of the Jews in Russia, and J. O. Armour \$500.

Swift & Company's sales of fresh beef in Chicago for the week ending Saturday, November 18, averaged approximately 5½ cents per pound.

The old firm of Geo. M. Sterne & Son has been dissolved, and Sterne & Son Company will hereafter attend to all the business of the old house.

If you have for sale or want to buy second-hand machinery—it must be in good working order—write our Chicago office. It will cost you postage only.

The National Provisioner publishes a classified and also an alphabetical index of first-class houses—live ones. Ask for prices of these concerns on anything you need.

Iowa papers state that Swift & Company are killing more than 50 per cent more poultry at their Marshalltown house this season than last, the majority of which are chickens.

Society Note, Matrimonial Burro.—King Alphonso and Sir Tummas both on the market; Tummas the best bargain by long odds. Alphonse needs an application of T. R.'s big stick.

The American Can Company has bought 415 feet of frontage on Illinois street, near

Orleans. The ground contains 43,000 square feet and the company will erect a factory thereon, to cost about \$250,000.

Beef, poultry, eggs, butter, cheese, rents, shoes, coal, everything going up—but look at the fun we have cussing the packer, butcher, grocer, landlord, shoemaker, coal dealer, gas and street car companies!

That woman who put \$15,000 worth of paper into the store and sat there with him watching it burn up, to test his love, should have added a couple of pounds of giant powder. They are not all dead yet, it seems.

The "square deal" which convicts indicted men before trial will now have to give precedence to the "square statute," which is above patting a man on the back just prior to kicking the central seam of his trousers.

Miller and Hart announce they are in the market all the time for fresh meats, and can supply all demand made upon them for new cured meats. Their brand of goods is justly popular, every effort being made to turn out superior material.

Board of Trade memberships are held at \$3,200 net, and \$3,100 is bid. A sale of board of trade 4 per cent bonds was made Monday at 102, the first transaction in two years, involving \$15,000. These bonds have been held at 104 prior to this sale.

According to the daily papers Mike Ado of Tokyo, accompanied by some other Much Ados, went to the Shinto Temple of Ise last week to offer thanks to Mike's ancestors for the successful termination of the war. That's what one might call taking all the gilt off. And by the way, where does Teddy come in?

If there is any one really interested in the packing and allied industries who does not subscribe for, borrow or steal The National Provisioner, we would like to hear from them. Less than six cents per week. Can you afford to be without it? It is a live paper for live people—that's all and everything.

A couple of Pat Crowes (with the lid on, however) were caught the latter part of last week attempting to levy blackmail on Armour & Company. They claimed to have letters showing that Armour & Company did business contrary to Hoyle, and in other ways hit below the belt and played Rugby rules

instead of the more ladylike Association style. Some of these packers are awfully rude, anyway.

Natt Burleigh, the fire insurance man, says there is not a square mile in America as well covered and equipped to fight fire as Packingtown, croakers to the contrary notwithstanding. He says that everything considered, Packingtown has an enviable record in this sense. If there is any fire insurance man who knows what he is talking about better than Mr. Burleigh, he hasn't been discovered. Burleigh believes in prevention.

This year's entries for the Stock Show, as compared with last year, are as follows:

	1905.	1904.
Cattle	589	555
Cattle	1,059	1,029
Sheep	930	730
Hogs	449	285
	3,027	2,599

Thomas B. Freshney, of Lincolnshire, England, will be one of this year's judges.

The new International Live Stock Exposition building will be absolutely fireproof and safe in other respects. The size of the building is 600 by 310 feet; auditorium, 310 x 200 feet; arena 250 x 100 feet; seating capacity, 10,000; cost, \$300,000. Applications have been made already by Ringling Bros. for use of this building at certain seasons, and several convention committees have been inquiring for terms. This will be one of the most substantial and capacious buildings of its kind in the world.

Every time the packers bat an eyelash, District Attorney Morrison and Assistant Attorney General Pagin both rush off to Washington to ask the boss what they shall do. Why doesn't Moody come to Chicago and save these traveling expenses? What is an assistant attorney-general good for if he has to go back to headquarters to learn his business? There is a whole lot of farce-comedy in this running around of little boys. A shyster lawyer would at least make a bluff at knowing what to do next. However, it may be a tough proposition for Morrison and Pagin to carry out the Colonel's orders to send somebody to jail. The government attorneys take no stock in that Chautauqua story about "leniency;" they have worn out the rails between Chicago and Washington trying to do otherwise.

ZACHARY T. DAVIS

ARCHITECT
79 Dearborn Street CHICAGO

Packinghouses a specialty. Eight years supervising architect with Armour & Co.

JAMES A. CANNON

1102 Mallery Building CHICAGO

Broker in Oils, Tallow, Greases and all Packinghouse Products. X X X Correspondence Solicited

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218 La Salle Street
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Broker and Commission Merchant
in TALLOW, GREASE and COTTONSEED OIL.
HIGHEST REFERENCES.

F. W. WILDER.
Formerly Gen'l Supt. Swift & Company;
Also Gen'l Supt., Designer and Constructor,
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Plant. Author of "The Modern Packing
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sas City. Constructor Swift & Company,
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WILDER & DAVIS Packing House Specialists

Designing, Constructing, Consulting.

**DESIGNERS AND CONSTRUCTORS OF PACKING
HOUSES AND ALLIED INDUSTRIAL PLANTS**

Rendering Plants, Commercial Fertilizer Plants, Sanitary Garbage Reduction
Plants, Ice and Cold Storage Plants.

If you contemplate building or remodeling or need advice in operating we can
help you.

**315 DEARBORN STREET.
MANHATTAN BUILDING**

**CHICAGO, U. S. A.
TELEPHONE HARRISON 524**

Louis A. Howard, president of Louis A. Howard & Company, Postal Telegraph Building, dealers in bones, fertilizers, grease, oils, etc., is one of the youngest and most successful men in the business, and has earned the sobriquet of "The Bone King," owing to

practically nothing but his nerve—little money and no experience whatever—and many a time was on the "ragged edge," but there was no such word as failure to be found in Louis's dictionary, and like Bruce's spider—he tried again and finally won his



LOUIS A. HOWARD, THE "BONE KING," IN ONE OF HIS BUZZ WAGONS.

the large individual deals he has engineered and big contracts he has made with some of the leading houses. Mr. Howard has unlimited financial support which has the utmost confidence in his integrity and ability, so much so that no deal he could make would be too large to be financed. When he started in business nine years ago he had

way to the top of the tree in his line of business.

Mr. Howard is a born salesman and says he can sell anything. While yet a mere "kid" he was making his two thousand per year selling plumbers' supplies and gas fixtures, which business is admittedly one of the hardest propositions on earth or in South Chicago.

When he started in his present business he was "pie" for the old vultures in the trade, but to-day the man who gets the best of him has to sit up all nights so as to be abroad early in the morning. Mr. Howard has representatives in several of the larger packing centers throughout the country, and keeps an experienced and well-posted representative on the road all the time, for he believes in the adage "Nothing ventured, nothing gained," and considers skillful advertising the secret of success. He lays the failure of many brokers and commission men to a lack of belief in these essential principles. Louis is up-to-date in everything, be it business, personal appearance, or pleasure, is an enthusiastic automobilist and keeps a splendid motor boat on Lake Delavan, Wis., where he spends his leisure time during the summer months. Trusts have no terror for him nor does competition worry him; he claims there is room enough and to spare for all, which sentiments emanate from the successful man.

Mr. Howard would be pleased to hear from all his old friends and is always open to make new ones; he says he can interest anyone having anything to sell in any quantities. He is at his office and among the trade every day and keeps things sizzling hot, he does not believe in lukewarm business practices. His office is elegantly furnished and is always at the disposal of the trade visiting Chicago. He makes a practice of extending to his visitors the use of his automobiles, and sees to it they have an enjoyable time. Be sure and make his acquaintance when you come to Chicago—it is worth your while from a business and every other point. A thoroughly up-to-date hustling young American business man, who does business on business principles.

IRRESPONSIBLE FOOD TALK.

There is about 90 per cent. too much talk about the horrible depravity of food packers and food sellers. These two classes are so numerous and so thoroughly representative of the nation that to denounce the typical grocer or the typical food packer as dishonest is pretty much like calling the nation a dishonest nation. But, of course, while irresponsible and well-paid officials of the Wiley type can obtain the limelight of the press almost continuously, the insinuations or open attacks on the food supply and the men who handle it are pretty sure to be continued. The people reason that the men in office ought to know, and as the men in office were never notorious for holding in their sentiments, howsoever ignorant and prejudiced they might be, it has become a pretty common custom to revile the American food packer and the American grocer.—*Merchants' Review.*

Look over the titles of text-books offered on The National Provisioner's special lists and see if there isn't something there you need. Special prices to our patrons.

NEW YORK	CHICAGO	SAN FRANCISCO
Everything in Pure Food Preservatives, Color Binders and Coagulators.		
HELLER CHEMICAL CO.,		
Laboratory and Main Office: 212-222 Wayman St. CHICAGO	No trouble to answer questions in any language.	HARRY HELLER, President and General Manager. 97-101 Warren Street NEW YORK

JULIUS DAVIDSON Broker and Commission Merchant PACKING HOUSE PRODUCTS COTTONSEED OIL 302 and 303 Kemper Bldg. Kansas City, Mo.

CHICAGO LIVESTOCK

RECEIPTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, Nov. 13.....	31,468	1,351	36,300	22,797
Tuesday, Nov. 14.....	8,740	906	35,295	22,058
Wednesday, Nov. 15.....	19,931	944	33,476	20,742
Thursday, Nov. 16.....	19,932	857	24,329	26,563
Friday, Nov. 17.....	1,832	233	20,871	7,157
Saturday, Nov. 18.....	591	82	12,016	243
Total last week.....	71,814	4,023	161,987	115,590
Previous week.....	78,608	6,059	162,986	119,839
Cor. week 1904.....	90,091	5,521	180,850	98,194
Cor. week 1903.....	75,475	4,394	157,491	126,724

SHIPMENTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, Nov. 13.....	6,174	74	6,115	1,435
Tuesday, Nov. 14.....	4,108	179	5,539	8,600
Wednesday, Nov. 15.....	5,902	64	7,280	10,237
Thursday, Nov. 16.....	5,750	59	5,945	9,961
Friday, Nov. 17.....	4,874	167	5,231	11,362
Saturday, Nov. 18.....	1,354	—	3,984	5,551

Total last week.....	28,151	543	34,097	47,146
Previous week.....	31,141	1,114	23,814	34,293
Cor. week 1904.....	80,938	547	23,800	18,703
Cor. week 1903.....	27,553	437	26,384	37,542
Combined receipts of hogs at eleven markets for week ending November 18, 1905.....	339,000			
Week ago.....	515,000			
Year ago.....	563,000			
Two years ago.....	518,000			
Total receipts for year to date, 20,290,000, against 18,439,000 year ago and two years ago 17,914,000.				

Receipts at six points (Chicago, Kansas City, Omaha, St. Louis, St. Joseph, Sioux City) as follows:

	Cattle.	Hogs.	Sheep.
Week ending Nov. 18, 1905.....	209,900	377,300	218,000
Week ago.....	245,400	378,400	231,200
Year ago.....	230,100	411,300	187,700
Two years ago.....	189,400	368,100	221,800
Receipts for year to Nov. 18.....	7,665,000	15,303,000	8,821,000
Receipts for same period last year.....	7,203,000	14,047,000	7,922,000

CHICAGO HOG SLAUGHTER.

Chicago packers slaughtered hogs during week ending Nov. 18 as follows:

Armour & Co.....	32,000
Anglo-American.....	9,200
Continental.....	4,200
Swift & Co.....	25,300
Hammond & Co.....	3,000
Morris & Co.....	10,400
Boyd-Lunham & Co.....	8,500
S. & S.....	12,800
H. Boore & Co.....	5,100
Robert & Oake.....	8,600
Other packers.....	15,900
Total.....	129,700
Left over.....	4,000
Week ago.....	133,500
Year ago.....	160,900
Two years ago.....	161,400

AVERAGE PRICE OF HOGS.

Week ending Nov. 18, 1905.....	\$4.81
Previous.....	4.98
Year ago.....	4.78
Two years ago.....	4.61
Three years ago.....	6.21

Estimated receipts of livestock week ending November 25:

Cattle.....	75,000
Hogs.....	150,000
Sheep.....	130,000

AVERAGE PRICE OF GOOD BEEF CATTLE.

Week ending Nov. 18.....	\$4.85
Previous week.....	4.80
Year ago.....	4.90
Two years ago.....	4.60
Three years ago.....	5.00

CATTLE.

Choice to prime steers.....	\$5.55@6.55
Common to good steers.....	4.90@5.65
Inferior to common steers.....	3.10@4.10
Yearlings, good to choice.....	4.50@5.90
Good to fancy cows and heifers.....	3.00@3.00
Fair to choice feeders.....	3.25@4.15
Fair to choice stockers.....	2.15@3.25
Good cutting and fair beef cows.....	2.15@2.65
Common to good culling cows.....	1.40@2.00
Bulls, common to choice.....	2.00@4.00
Calves, common to good.....	3.75@5.50
Calves, good to fancy.....	6.50@7.25

HOGS.

Good to choice shipping.....	\$4.85@4.95
Good to choice butcher weights.....	4.90@5.00
Good to choice heavy mixed.....	4.80@4.90
Heavy packing.....	4.40@4.80
Light mixed.....	4.60@4.90
Good to choice, 185@250-lb. weights.....	4.85@4.95
Choice to prime heavy.....	4.85@5.00
Poor to choice pigs.....	4.25@4.75
Governments, boars and stags.....	1.50@4.25

SHEEP.

Export wethers.....	\$4.75@5.50
Fair to prime wethers.....	4.75@5.50
Ewes, good to prime.....	4.25@5.00
Yearlings, fair to fancy.....	5.00@6.75
Culls, ewes, poor to fair.....	3.00@4.00
Bucks and stags.....	3.50@3.75
Native lambs, poor to choice.....	5.50@7.15
Western lambs.....	6.00@8.50
Feeding lambs.....	5.50@6.25
Breeding ewes.....	4.90@5.25

CHICAGO PROVISION LETTER.

(Special Letter to The National Provisioner from C. D. Forryth & Co.)

Chicago, Nov. 22.—We quote to-day's market as follows: Green hams, 10@12 ave, 8½; 12@14 ave, 8½; 14@16 ave, 8; 18@20 ave, 7½; green picnics, 5@6 ave, 6; 6@8 ave, 6; 8@10 ave, 5½; 10@12 ave, 5½; green N. Y. shoulders, 10@12 ave, 6½; 12@14 ave, 6½; green skinned hams, 18@20 ave, 8½; green clear bellies, 8@10 ave, 10½c; 10@12 ave, 9½; No. 1 S. P. hams, 8@10 ave, 9½; 10@12 ave, 9½; 12@14 ave, 9½; 14@16 ave, 8½; 18@20 ave, 8½; No. 2 S. P. hams, 10@12 ave, 8½; 12@14 ave, 8½; 14@16 ave, 8½; No. 1 S. P. skinned hams, 16@19 ave, 8½; 18@20 ave, 8½; 20@22 ave, 8½; 22@24 ave, 8½; 24@26 ave, 8½; 26@28 ave, 8; No. 1 S. P. picnics, 5@6 ave, 6½; 6@7 ave, 6½; 6@8 ave, 6; 7@9 ave, 5½; 8@10 ave, 5½; 10@12 ave, 5½; No. 1 S. P. N. Y. shoulders, 8@10 ave, 6½; 10@12 ave, 6½; 12@14 ave, 6½; S. P. clear bellies, 6@8 ave, 10½; 8@10 ave, 10½; 10@12 ave, 9½. Prices on S. P. meats are all loose, f. o. b., Chicago.

CHICAGO PROVISION MARKET
Range of Prices.

SATURDAY, NOVEMBER 18, 1905.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
January.....	6.87	6.87	6.87	6.87
May.....	7.02	7.02	7.02	7.02
RIBS—(Boxed 25c. more than loose)—				
January.....	—	—	—	—
May.....	6.75	6.77	6.75	6.77
PORK—(Per barrel)—				
January.....	12.65	12.70	12.65	12.70
May.....	12.75	12.80	12.75	12.80

MONDAY, NOVEMBER 20, 1905.

LARD—(Per 100 lbs.)—				
January.....	6.87	6.90	6.87	6.87
May.....	7.02	7.05	7.02	7.02
RIBS—(Boxed 25c. more than loose)—				
January.....	6.57	6.57	6.55	6.55
May.....	6.77	6.80	6.77	6.77
PORK—(Per barrel)—				
January.....	12.72	12.72	12.70	12.70
May.....	12.85	12.85	12.82	12.82

TUESDAY, NOVEMBER 21, 1905.

LARD—(Per 100 lbs.)—				
January.....	6.87	6.87	6.85	6.85
May.....	7.00	7.00	6.97	6.97
RIBS—(Boxed 25c. more than loose)—				
January.....	6.52	6.55	6.50	6.50
May.....	6.75	6.75	6.70	6.70
PORK—(Per barrel)—				
January.....	12.72	12.72	12.67	12.67
May.....	12.77	12.77	12.77	12.77

WEDNESDAY, NOVEMBER 22, 1905.

LARD—(Per 100 lbs.)—				
January.....	6.87	6.87	6.85	6.85
May.....	7.00	7.02	6.97	6.97
RIBS—(Boxed 25c. more than loose)—				
January.....	6.52	6.52	6.50	6.52
May.....	6.75	6.75	6.72	6.72
PORK—(Per barrel)—				
January.....	12.72	12.72	12.65	12.67
May.....	12.82	12.82	12.75	12.77

THURSDAY, NOVEMBER 23, 1905.

LARD—(Per 100 lbs.)—				
January.....	6.87	6.90	6.87	6.90
May.....	7.00	7.07	7.00	7.05
RIBS—(Boxed 25c. more than loose)—				
January.....	6.55	6.60	6.55	6.60
May.....	6.75	6.82	6.75	6.80
PORK—(Per barrel)—				
January.....	12.72	12.85	12.72	12.82
May.....	12.87	12.92	12.82	12.92

FRIDAY, NOVEMBER 24, 1905.

LARD—(Per 100 lbs.)—				
January.....	6.90	6.95	6.90	6.92
May.....	7.05	7.07	7.05	7.06
RIBS—(Boxed 25c. more than loose)—				
January.....	6.60	6.67	6.60	6.65
May.....	6.82	6.87	6.80	6.85
PORK—(Per barrel)—				
January.....	12.80	13.00	12.80	12.90
May.....	12.95	13.05	12.95	12.95

JOHN WISHART & CO.

43 So. Canal Street, Chicago

CONSULTING ENGINEERS and
PACKINGHOUSE SPECIALISTS

Complete Specifications, Insulations
and Tests.

CHICAGO RETAIL FRESH MEATS.

NOTE.—It is difficult to quote flat retail figures applicable to the whole of the city, every market having a practically different scale according to location, class and volume of trade, etc.

Beef.

Native Rib Roasts.....	15	15
Native Sirloin Steaks.....	16	16
Native Porterhouse Steaks.....	20	22
Native Pot Roasts.....	3	18
Rib Roasts from light cattle.....	3	18
Beef Stew.....	5	3
Boneless Corned Briskets, Native.....	5	3
Corned Rumps, Native.....	5	3
Corned Ribs.....	5	3
Corned Flanks.....	5	3
Round Steaks.....	10	12½
Round Roasts.....	10	12½
Shoulder Steaks.....	5	3
Shoulder Roasts.....	5	3
Shoulder Neck End, Trimmed.....	5	7
Rollad Roast.....	10	11

Lamb.

Hind Quarters, fancy.....	10
Fore Quarters, fancy.....	12½
Legs, fancy.....	16
Stew.....	3
Shoulders.....	10
Chops, Rib and Loin.....	20

Mutton.

Legs.....	11
Stew.....	5
Shoulders.....	5
Hind Quarters.....	10
Fore Quarters.....	5
Rib and Loin Chops.....	18

Pork.

Pork Loin.....	8½
Pork Chops.....	10
Pork Tenderloins.....	20
Pork Butts.....	9
Spare Ribs.....	5
Blades.....	5
Hocks.....	7
Pigs' Heads.....	5
Leaf Lard.....	9

Veal.

Hind Quarters.....	12½
Fore Quarters.....	7
Legs.....	16
Breasts.....	3
Shoulders.....	10
Cutlets.....	20

Butchers' Offal.

Tallow.....	5
Mixed Bone and Tallow.....	1½
Calfskins, 8 to 15 lbs.....	15
Calfskins, under 8 lbs. (deacones).....	50

SOUTH WATER STREET MARKETS.

Live Poultry.

Turkeys.....	12	14
Fowls.....	7	8½
Roosters.....	7	7
Springs.....	9	10
Ducks.....	11	11
Geese.....	8	10

Dressed Poultry.

Turkeys.....	17	18
Chickens.....	9	10
Springs.....	10	10½
Ducks.....	12	13
Geese.....	10	12
Capons.....	15	18

Veal.

Choice.....	8½	9½
Good.....	7	8
Medium.....	6½	7½
Coarse, heavy.....	5	6½
Coarse, small.....	4	5

Dressed Beef.

Ribs, No. 1.....	12½
Ribs, No. 2.....	8
Ribs, No. 3.....	5
Loin, No. 1.....	14
Loin, No. 2.....	10
Loin, No. 3.....	6
Rounds, No. 1.....	7
Rounds, No. 2.....	6
Rounds, No. 3.....	5
Chucks, No. 1.....	4
Chucks, No. 2.....	4
Chucks, No. 3.....	3½
Plates, No. 1.....	8½
Plates, No. 2.....	5½
Plates, No. 3.....	3

Butter.

Creamery Prints.....	22½
Creamery Extras.....	24
Creamery, Firsts.....	20
Creamery, Seconds.....	17½
Dairies, Choice.....	23
Dairies, Firsts.....	21
Dairies, Ladies.....	18½
Dairies, Packing Stock.....	15½
Renovated.....	19

Eggs.

Extras.....	30
Prime Firsts.....	28
Firsts.....	24
Fresh, at market, cases inc.....	15
Cold Storage.....	20

CHICAGO MARKET PRICES

WHOLESALE FRESH MEATS.

Carcass Beef.

Western Cows	4	4 1/4
Native Cows	4 1/4	4 1/4
Western Steers	5 1/4	6
Good Native Steers	7 1/4	8
Native Steers, Medium	6 1/4	7 1/4
Heifers, Good	6 1/4	7
Heifers, Medium	5	5 1/4
Hind Quarters	1 1/4 c.	over Straight Beef
Fore Quarters	1 c.	under Straight Beef

Beef Cuts.

Steer Chucks	5 1/4	5 1/4
Cow Chucks	5	5 1/4
Boneless Chucks	5	5 1/4
Medium Plates	5 1/4	5 1/4
Steer Plates	5 1/4	5 1/4
Cow Rounds	5 1/4	5 1/4
Steer Rounds	5 1/4	5 1/4
Cow Loins, Common	6 1/4	6 1/4
Cow Loins, Medium	6 1/4	7 1/4
Cow Loins, Good	6 1/4	8
Steer Loins, Light	10 1/4	11
Steer Loins, Heavy	10 1/4	11 1/4
Beef Tenderloins, No. 1	15	16
Beef Tenderloins, No. 2	12 1/4	13
Strip Loins	5 1/4	6
Shin Butts	5 1/4	6
Shoulder Chops	4 1/4	5
Balls	5	5 1/4
Rump Butts	4 1/4	5
Trimnings	2 1/4	3
Shank	2 1/4	3
Cow Ribs, Heavy	5	5 1/4
Cow Ribs, Common Light	5	5
Steer Ribs, Light	10	10
Steer Ribs, Heavy	11 1/4	11 1/4
Loin Ends, steer-native	9 1/4	9 1/4
Loin Ends, cow	6	6
Hanging Tenderloins	4 1/4	4 1/4
Flank Steak	6 1/4	6 1/4

Beef Offal.

Livers	3	3
Hearts	2 1/4	2 1/4
Tongues	1 1/4	1 1/4
Sweetbreads	1 1/4	1 1/4
Ox Tail, per lb.	4 1/4	4 1/4
Fresh Tripe—plain	2 1/4	2 1/4
Fresh Tripe, H. C.	2 1/4	2 1/4
Kidneys, each	2 1/4	2 1/4
Brains	3 1/4	3 1/4

Veal.

Heavy Carcass Veal	6	6 1/4
Light Carcass	7	7
Medium Carcass	8	8
Good Carcass	10	10
Medium Saddles	10 1/4	10 1/4
Good Saddles	12 1/4	12 1/4
Medium Racks	8 1/4	8 1/4
Good Racks	8	8

Veal Offal.

Brains, each	3 1/4	3 1/4
Sweetbreads	5 1/4	5 1/4
Plucks	25	25
Heads, each	10	10

Lambs.

Medium Caul	9 1/4	9 1/4
Good Caul	10	10
Round Dressed Lambs	12	12 1/4
Saddles Caul	11	11
R. D. Lamb Saddles	13 1/4	13 1/4
Caul Lamb Racks	9	9
Lamb Fries, per pair	9 1/4	9 1/4
Lamb Tongues, each	3	3
Lamb Kidneys, each	1 1/4	1 1/4

Mutton.

Medium Sheep	8	8 1/4
Good Sheep	9 1/4	9 1/4
Medium Saddles	10	10
Good Saddles	11	11
Medium Racks	8 1/4	8 1/4
Good Racks	8	8 1/4
Mutton Legs	10	10 1/4
Mutton Stew	4 1/4	5
Mutton Loins	10	11
Sheep Tongues, each	3	3
Sheep Heads, each	5	5

Fresh Pork, Etc.

Dressed Hogs	6 1/4	6 1/4
Pork Loins	8	8
Leaf Lard	8 1/4	8 1/4
Tenderloins	17	17
Spare Ribs	6 1/4	6 1/4
Butts	4 1/4	4 1/4
Hocks	4 1/4	4 1/4
Trimnings	5 1/4	5 1/4
Tails	2 1/4	2 1/4
Snouts	2 1/4	2 1/4
Pigs' Feet	2	2
Pigs' Heads	2 1/4	2 1/4
Blade Bones	4 1/4	4 1/4
Check Meat	2 1/4	2 1/4
Hog Plucks	4	4
Neck Bones	4	4
Skinned Shoulders	5 1/4	5 1/4
Pork Hearts	2 1/4	2 1/4
Pork Kidneys	2	2
Pork Tongues	2 1/4	2 1/4
Slip Bones	2 1/4	2 1/4
Tail Bones	2 1/4	2 1/4
Brains	2 1/4	2 1/4
Backfat	6 1/4	7
Hams	8	9
Tails	8	9
Shoulders	6 1/4	6 1/4
Bellies	5 1/4	6
Compressed Ham	9	9
Large Compressed Ham	9	9

SAUSAGE.

Cloth Bologna	5	5
Bologna, large, long, round and cloth	4 1/4	4 1/4
Choice Bologna	6	6
Viennas	7	7
Frankfurters	6 1/4	6 1/4
Blood, Liver and Headcheese	5 1/4	5 1/4
Tongues	8	8
White Tongue	8 1/4	8 1/4
Minced Ham	10	10
Prepared Ham	12	12
New England Ham	8	8
Berliner Ham	11	11
Boneless Ham	11	11
Oxford Ham	11	11
Polish Sausage	6	6
Leona, Garlic, Knoblauch	6	6
Smoked Pork	6	6
Veal Ham	6	6
Farm Sausage	12	12
Pork Sausage, bulk or link	7 1/4	7 1/4
Pork Sausage, short link	7 1/4	7 1/4
Special Prepared, Ham	7 1/4	7 1/4
Boneless Pigs' Feet	5 1/4	5 1/4
Ham Bologna	6 1/4	6 1/4
Special Compressed Ham	10	10

Summer Sausages.

Supreme Summer, H. C., New Medium Dry	16	16
German Salami, New Dry	14	14
Holsteiner, New	11	11
Mettwurst, New	12	12
Farmer, New	12	12
Darles, H. C., New	17	17
Italian Salami, New	17	17
Monarque Cervelat	13	13

Sausage in Oil.

Smoked Pork, 1-50	43.75	43.75
Smoked Pork, 2-20	3.25	3.25
Bologna, 1-50	2.75	2.75
Bologna, 2-20	2.25	2.25
Viennas, 1-50	4.25	4.25
Viennas, 2-20	3.75	3.75

VINEGAR PICKLED GOODS.

Pickled Pigs' Feet, in 200-lb. barrels	47.00	47.00
Pickled Plain Tripe, in 200-lb. barrels	4.50	4.50
Pickled H. C. Tripe, in 200-lb. barrels	7.75	7.75
Pickled Ox Lips, in 200-lb. barrels	11.00	11.00
Pickled Pigs' Snouts, in 200-lb. barrels	12.00	12.00
Lamb Tongue, Short Cut, barrels	30.00	30.00

CORNED, BOILED AND ROAST BEEF.

1 lb., 2 doz. to case	Per doz.	1.30
2 lbs., 1 or 2 doz. to case	2.35	2.35
4 lbs., 1 doz. to case	4.70	4.70
6 lbs., 1 doz. to case	8.00	8.00
14 lbs., 1/2 doz. to case	18.00	18.00

EXTRACT OF BEEF.

1 oz. jars, 1 dozen in box	Per doz.	32.25
2 oz. jars, 1 dozen in box	3.55	3.55
4 oz. jars, 1 dozen in box	6.50	6.50
8 oz. jars, 1/2 dozen in box	11.60	11.60
6 oz. jars, 1/2 dozen in box	22.00	22.00
2, 5 and 10-lb. tins	11.75 per lb.	11.75 per lb.

BARRELED BEEF AND PORK.

Extra Plate Beef	Per lb.	10.00
Plate Beef	9.50	9.50
Extra Mess Beef	8.50	8.50
Prime Mess Beef	9.00	9.00
Beef Hams	14.00	14.00
Rump Butts	14.00	14.00
Mess Pork	11.00	11.00
Clear Fat Backs	11.00	11.00
Family Back Pork	11.00	11.00
Bean Pork	11.00	11.00

LARD.

Pure leaf, kettle rendered, per lb., tierces	8 1/4	8 1/4
Lard, substitute, tierces	6	6
Lard, compounds	5 1/4	5 1/4
Barrels	1/2 c. over tier.	1/2 c. over tier.
Half barrels	1/2 c. over tier.	1/2 c. over tier.
Tubs, from 10 to 60 lbs.	1/2 c. to 1 c. over tier.	1/2 c. to 1 c. over tier.
Cooking Oil, per gal.	34	34

BUTTERINE.

Nos. 1 to 6, natural color	11	11
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DRY SALT MEATS.

Clear Bellies, 14@16 average	9.87 1/4	9.87 1/4
Rib Bellies, 14@16 average	9.87 1/4	9.87 1/4
Fat Backs	7.37 1/4	7.37 1/4
Regular Plates	7.37 1/4	7.37 1/4
Short Clears	8.25	8.25

WHOLESALE SMOKED MEATS.

Hams, 12 lbs. average	12	12
Hams, 16 lbs. average	11 1/4	11 1/4
Skinned Hams	10 1/4	10 1/4
Calas, 6@12 lbs. average	6 1/4	6 1/4
Breakfast Bacon, fancy	12 1/4	12 1/4
Wide, 8@10 average, and Strip, 4@5 ave.	12 1/4	12 1/4
Wide, 12@14 average, and Strip, 8@9 ave.	12 1/4	12 1/4
Dried Beef Seta	12 1/4	12 1/4
Dried Beef Inside	12 1/4	12 1/4
Dried Beef Knuckles	14	14
Dried Beef Outsoles	11 1/4	11 1/4
Regular Balled Hams	14 1/4	14 1/4
Smoked Balled Hams	16 1/4	16 1/4
Balled Picnic Hams	10 1/4	10 1/4
Cooked Loin Rolls	20	20

SAUSAGE CASINGS.

P. O. B. CHICAGO.	13	13
Rounds, per set	40	40
Middles, per set	40	40

Beef bungs, per piece	5 1/4	5 1/4
Hog casings, as packed	25	25
Hog casings, free of salt	50	50
Hog middles, per set	12	12
Hog bungs, export	12 1/2	12 1/2
Hog bungs, large mediums	8	8
Hog bungs, prime	8	8
Imported wide sheep casings	2 1/2	2 1/2
Imported medium wide sheep casings	70	70
Imported narrow sheep casings	80	80
Beef weasands	5 1/4	5 1/4
Beef bladders, medium	17	17
Beef bladders, small, per doz.	17	17
Hog stomachs, per piece	14	14

FERTILIZERS.

Dried blood, per unit	\$2.47 1/4	\$2.47 1/4
Hoof meal, per unit	2.45	2.45
Concent, tankage, 15% per unit	\$2.20	\$2.22 1/4
Ground tankage, 12% per unit	2.35	2.35
Ground tankage, 10% per unit	2.27 1/2 to 2.30	2.27 1/2 to 2.30
Ground tankage, 9 and 20% per unit	2.23 1/2 to 2.17 1/2	2.23 1/2 to 2.17 1/2
Ground tankage, 6 and 35% per unit	18.00	18.00
Ground raw bone, per ton	25.00	25.00
Ground steam bone, per ton	18.00	18.00
Ungrind tankage, per ton less than ground	50c.	50c.

HORNS, HOOFS AND BONES.

Horns, No. 1, 65@70 lbs. average	\$375.00	\$375.00
Horns, black, per ton	20.00	20.00
Horns, striped, per ton	30.00	30.00
Horns, white, per ton	35.00	35.00
Flat shin bones, 38 to 47 lbs. ave. ton	45.00	45.00
Round shin bones, 38 to 40 lbs. ave. ton	52.50	52.50
Round shin bones, 50 to 52 lbs. ave. ton	67.50	67.50
Long thigh bones, 90 to 95 lbs. ave. ton	95.00	95.00
Jaws, skulls and knuckles, per ton	25.00	25.00

LARDS.

Prime steam, cash	\$7.00	\$7.00
Prime steam, loose	6.75	6.75
Neutral	9 1/4	9 1/4
Compound	5 1/4	5 1/4
Leaf	7 1/4	7 1/4

STEARINES.

Prime oleo	7 1/4	7 1/4
Oleo, No. 2	6 1/4	6 1/4
Mutton	7 1/4	7 1/4
Tallow	5 1/4	5 1/4
Grease	4 1/4	4 1/4

OILS.

Lard oil, extra winter strained, tierces	62	63
Extra No. 1 lard oil	42	44
No. 1 lard oil	35	37
No. 2 lard oil	32	35
Oleo oil, extra	10	10 1/4
Oleo oil, No. 2	7 1/4	9 1/4
Oleo stock, pure, tierces	7	8 1/2
Neatsfoot oil, pure, tierces	50	55
Acidless tallow oil, tierces	53	55

TALLOW.

Edible	5 1/4	6
Prime city	5 1/4	5 1/4
Choice country	4 1/4	5
Packers' prime	5 1/4	5 1/4
Packers' No. 1	4 1/4	4 1/4
Packers' No. 2	3 1/4	3 1/4
Renderers' No. 1	4 1/4	4 1/4

GREASES.

White, choice	5 1/4	5 1/4
White, "A"	4 1/4	4 1/4
White, "B"	4	4 1/4
Bone	3 1/4	4 1/4
House	3 1/4	3 1/4
Yellow	3 1/4	3 1/4
Brown	3 1/4	3 1/4
Glue stock	3 1/4	3 1/4
Neatsfoot stock	3 1/4	3 1/4
Garbage Grease	3 1/4	3 1/4

COTTONSEED OILS.

P. S. Y., loose	27	28
P. S. Y., soap grade	26	27
Soap bbls., concn., 65@65% F. A.	1 1/4	1 1/4
Soap stock, bbls., reg., 50% F. A.	1.00	1.05

COOPERAGE.

Tierces	\$1.27 1/4	\$1.30
Barrels, oak	1.12	\$1.15
Barrels, ash	1.00	\$1.05

CURING MATERIALS.

Refined saltpetre	4 1/4	5 1/4
Boric acid, crystal to powdered	10	11
Borax	7 1/4	8 1/4
Sugar—		
White, clarified	3 1/4	3 1/4
Plantation, granulated	4 1/4	4 1/4
Yellow, clarified	3 1/4	3 1/4
Salt—		
Ashton, in bags, 224 lbs.	3.00	3.00
Eng. packing, in bags, 224 lbs.	1.48	1.48
Michigan, medium, car lots, per ton	3.50	3.50
Michigan, granulated, car lots, per ton	3.00	3.00
Casing salt, bbls., 250 lbs., 2x@2x	1.35	1.35

LOUIS A. HOWARD & CO.

Dealers
Office, Postal Telegraph Building
Warehouse, Union Stock Yards
Chicago
TALLOW GREASE STEARINES
LARD OIL NEATS

NEW YORK MARKET PRICES

LIVE CATTLE.

Good to choice native steers.....	\$4.55@45.50
Medium to fair native steers.....	4.00@ 4.75
Poor to ordinary native steers.....	3.85@ 3.85
Good to choice native steers one year ago.....	5.10@ 5.55
Oxen and stags.....	2.50@ 4.40
Bulls and dry cows.....	1.45@ 3.75

LIVE CALVES.

Live veal calves, prime, per 100 lbs.....	\$8.75@9.00
Live veal calves, fair to good, per 100 lbs.....	7.50@8.50
Live veal calves, com. to med., 100 lbs.....	4.50@7.25
Live veal calves, small, per 100 lbs.....	3.00@4.00
Live veal calves, buttermilk, per 100 lbs.....	—@—
Live veal calves, grassers, per 100 lbs.....	2.25@2.75

LIVE SHEEP AND LAMBS.

Live lambs, choice to good, per 100 lbs.....	\$7.25@7.75
Live lambs, com. to fair, per 100 lbs.....	6.25@7.00
Live sheep, culls, per 100 lbs.....	5.00@6.00
Live sheep, culls, per 100 lbs.....	2.50@3.25

LIVE HOGS.

Hogs, heavy weights (per 100 lbs).....	\$5.45@5.50
Hogs, medium.....	@ 5.45
Hogs, 140 lbs.....	5.50@ 5.55
Pigs.....	5.50@ 5.55
Roughs.....	4.45@ 4.53

DRESSED BEEF.

CITY DRESSED.

Choice native, heavy.....	@ 8 1/2
Choice native, light.....	8 @ 8 1/4
Common to fair, native.....	7 @ 7 1/2

WESTERN DRESSED BEEF.

Choice native, heavy.....	@ 8 1/2
Choice native, light.....	8 @ 8 1/4
Native, com. to fair.....	7 @ 7 1/2
Choice Western, heavy.....	7 1/2 @ 8
Choice Western, light.....	7 @ 7 1/2
Choice Western, heavy.....	7 1/2 @ 8
Common to fair Texas.....	5 @ 6
Good to choice heifers.....	@ 7
Common to fair heifers.....	5 @ 6 1/2
Choice cows.....	@ 6 1/2
Common to fair cows.....	5 @ 6
Good to choice oxen and stags.....	@ 7
Common to fair oxen and stags.....	@ 6 1/2
Fleshy bologna bulls.....	4 1/2 @ 5
Fresh pork loins, Western.....	9 @ 9 1/2

DRESSED CALVES.

Veals, city dressed, prime, per lb.....	@ 13
Veals, good to choice, per lb.....	11 1/2 @ 12 1/2
Calves, country dressed, prime, per lb.....	@ 11 1/2
Calves, country dressed, fair to good.....	@ 11
Calves, country dressed, common.....	9 @ 10

DRESSED HOGS.

Pigs.....	7 1/2 @ 8
Hogs, heavy.....	@ 7 1/2
Hogs, 180 lbs.....	6 1/2 @ 7
Hogs, 160 lbs.....	7 @ 7 1/2
Hogs, 140 lbs.....	@ 7 1/2

DRESSED SHEEP AND LAMBS.

Spring lambs, choice, per lb.....	@ 12
Spring lambs, good.....	11 @ 11 1/2
Spring lambs, culls.....	9 @ 10 1/2
Sheep, choice.....	@ 9 1/2
Sheep, medium to good.....	8 1/2 @ 9
Sheep, culls.....	7 @ 8

PROVISIONS.

(Jobbing Trade.)

Smoked hams, 10 lbs. average.....	11 1/2 @ 12
Smoked hams, 12 to 14 lbs. average.....	11 @ 11 1/2
Smoked hams, heavy.....	11 @ 11 1/2
California hams, smoked, light.....	7 1/2 @ 7 3/4
California hams, smoked, heavy.....	7 1/2 @ 7 3/4
Smoked shoulders.....	8 @ 8 1/2
Smoked bacon, boneless.....	12 1/2 @ 13
Smoked bacon (rib in).....	12 @ 12 1/2
Dried beef cuts.....	13 @ 13 1/2
Smoked beef tongue, per lb.....	@ 17
Pickled bellies, heavy.....	9 1/2 @ 10 1/2

BONES, HOOF AND HORNS.

Round shin bones, av. 50@60 lbs. cut.....	—@—
Flat shin bones, av. 40@45 lbs. cut, per 100 bones, per 2,000 lbs.....	42.00@ 45.00
Hoofs, per ton.....	@ 30.00
Thigh bones, av. 90@95 lbs. cut, per 100 bones, per 2,000 lbs.....	@ 75.00
Horns, 7 1/2 oz. and over, steers, first quality, per ton.....	@ 300.00

BUTCHERS' SUNDRIES.

Fresh steer tongues.....	75@80c. a piece
Fresh cow tongues.....	50@60c. a piece
Calfs' head, scalded.....	20@25c. a piece
Sweetbread, veal.....	25@27c. a pair
Sweetbread, beef.....	18@25c. a pound
Calfs' liver.....	25@30c. a piece
Beef kidneys.....	7@12c. a piece
Mutton kidneys.....	1 1/4 @ 1 1/2 c. a piece
Livers, beef.....	@ 5c. a pound

Ortails.....	6@7c. a piece
Heart, beef.....	6@10c. a piece
Holla, beef.....	10@12c. a pound
Tenderloin beef, Western.....	15@25c. a pound
Lamb's fries.....	6@10c. a pair
Fresh pork, loins, city.....	6@10c. 11 1/2
Fresh pork, loins, Western.....	11

BUTCHERS' FAT.

Ordinary shop fat.....	2 1/2 @ 3
Suet, fresh and heavy.....	4 @ 5
Shop bones, per cwt.....	@ 25

SAUSAGE CASINGS.

Sheep, imp., wide, per bundle.....	80
Sheep, imp., wide, per keg, 50 bundles.....	\$40.00
Sheep, imp., medium, per bundle.....	80
Sheep, imp., per bundle, narrow.....	44
Sheep, imp., Russian Rings.....	—
Hog, American, free of salt, in tierces or bbls., per lb., f. o. b.....	50
Hog, American, kegs, per lb., f. o. b.....	50
Beef, rounds, per set, f. o. b. Chicago.....	13
Beef, rounds, per set, f. o. b. New York.....	14
Beef, rounds, per lb.....	8
Beef, bungs, piece, f. o. b. New York.....	6 1/4
Beef, middles, per set, f. o. b. Chicago.....	5
Beef, middles, per set, f. o. b. New York.....	42
Beef, middles, per lb.....	6 1/4
Beef weasands, per 1,000, No. 1s.....	5 1/4 @ 5 1/2
Beef weasands, per 1,000, No. 2s.....	2 1/2 @ 3

SPICES.

	Whole.	Ground.
Pepper, Sing., white.....	18	19 1/2
Pepper, Sing., black.....	12 1/2	14
Pepper, Penang, white.....	17	18 1/2
Pepper, red, Zanzibar.....	14	17
Pepper, shot.....	14	—
Allspice.....	7	9 1/2
Coriander.....	10	12
Cloves.....	15 1/2	18 1/2
Mace.....	42	45

SALTPETRE.

Crude.....	@ 4 1/2
Refined—Granulated.....	4 1/2 @ 4 1/2
Crystals.....	4 1/2 @ 5 1/2
Powdered.....	5 @ 5 1/2

GREEN CALFSKINS.

No. 1 skins.....	\$0.20
No. 2 skins.....	.18
No. 1 B. M. skins.....	.18
No. 2 B. M. skins.....	.16
No. 1, 12 1/2-14.....	2.00
No. 2, 12 1/2-14.....	1.75
No. 1 B. M., 12 1/2-14.....	1.80
No. 2 B. M., 12 1/2-14.....	1.90
No. 1 kips, 14-18.....	2.15
No. 2 kips, 14-18.....	2.00
No. 1 B. M. kips.....	2.00
No. 2 B. M. kips.....	1.90
No. 1 heavy kips, 18 and over.....	2.40
No. 2 heavy kips, 18 and over.....	2.40
Branded skins.....	.12
Heavy branded kips.....	1.50
Ticky skins.....	.12
Ticky kips.....	1.60
Heavy ticky kips.....	1.80
No. 3 skins.....	.12

DRESSED POULTRY.

FRESH KILLED—ICE PACKED.	
Turkeys—Spring dry-picked, selected (culls out).....	@ 18
Spring, dry-picked, average run.....	@ 17
Spring, dry-picked, poor to medium grades.....	@ 14
Spring, scalded, selected (culls out).....	@ 18
Spring, scalded, average run.....	@ 17
Spring, scalded, poor to medium.....	@ 14
Old, selected (culls out).....	@ 17
Old, poor to medium.....	@ 14
Chickens, Broilers—4 lbs. per pair and under.....	@ 16

Philadelphia, dry-picked, fancy.....	22 @ 24
Philadelphia, dry-picked, average run.....	@ 20
New York & Pa., dry-picked, fancy.....	@ 20
New York & Pa., dry-picked, average run.....	@ 16
Western, milk-fed, dry-picked, fancy.....	@ 18
Western, milk-fed, scalded, fancy.....	@ 17
Western, dry-picked, selected (culls out).....	@ 17
Western, dry-picked, average run.....	@ 15
South and Southwestern, dry-picked, average run.....	@ 13
Western, scalded, fancy.....	@ 14
Western, scalded, average run.....	@ 13
South and Southwestern, scalded, average run.....	@ 11
South and Southwestern, scalded, poor to medium.....	@ 10

Chickens, Roasting—	
Philadelphia, dry-picked, fancy.....	@ 20
Philadelphia, dry-picked, average run.....	@ 17
New York & Pa., dry-picked, fancy.....	@ 14
N. Y. & Pa., dry-picked, average run.....	@ 12
N. Y. & Pa., dry-picked, poor to medium.....	@ 11
Western, milk-fed, dry-picked, fancy.....	@ 15
Western, milk-fed, scalded, fancy.....	@ 14 1/2
Western, dry-picked, selected (culls out).....	@ 13
Western, dry-picked, average run.....	@ 11
Western, dry-picked, poor to medium.....	@ 9
Southern, dry-picked, average run.....	@ 11 1/2
Western, scalded, selected (culls out).....	@ 13
Western, scalded, average run.....	@ 11
Western, scalded, poor to medium.....	@ 9
South & Southwestern, scalded, average run.....	@ 10 1/2
South & Southwestern, scalded, poor to medium.....	@ 8

Chickens, Medium Weights—	
Philadelphia, dry-picked, average run.....	14 @ 15
N. Y. & Pa., dry-picked, average run.....	@ 13
Western, milk-fed, dry-picked, fancy.....	12 @ 12 1/2
Western, milk-fed, scalded, fancy.....	@ 12 1/2
Western, dry-picked, average run.....	10 @ 11
Western, dry-picked, poor to medium.....	9 @ 10
Southern, dry-picked, average run.....	10 @ 10 1/2
Western, scalded, average run.....	10 @ 11
Western, scalded, poor to medium.....	8 @ 10
South & Southwestern, scalded, average run.....	10 @ 11
Southern & Southwestern, scalded, inferior grades.....	8 @ 9
Fowls—Philadelphia, dry-picked, fancy.....	@ 14
Philadelphia, dry-picked, average run.....	@ 13
Western, dry-picked, 5 lbs. and over, selected (culls out).....	@ 13
Western, dry-picked, average run.....	11 @ 11 1/2
Western, dry-picked, poor to medium.....	9 @ 10
Southern & Southwestern, dry-picked, average run.....	10 @ 11
Western, scalded, selected (culls out).....	11 @ 11
Western, scalded, average run.....	10 @ 10 1/2
Western, scalded, poor to medium.....	8 @ 9
Southern & Southwestern, scalded, average run.....	9 1/2 @ 10
Southern & Southwestern, inferior grades.....	8 @ 9
Other Poultry—Old cocks, dry-scalded.....	@ 9
Old cocks, scalded.....	@ 8 1/2
Ducks, Spring, Western, per lb.....	10 @ 11
Geese, Eastern, white, per lb.....	12 @ 14
Geese, Eastern, dark, per lb.....	15 @ 16
Geese, Western, average run.....	8 @ 11
Squabs, prime white, 8 lbs. to dox., per dozen.....	@ 4.00
Squabs, prime white, 7 lbs. to dox., per dozen.....	@ 3.00
Squabs, prime white, 6 1/2 lbs. to dox., per dozen.....	@ 2.50
Squabs, mixed, per dozen.....	2.00 @ 2.25
Squabs, dark, per dozen.....	@ 1.75
Squabs, culls, per dozen.....	@ 1.50

LIVE POULTRY.

Spring Chickens, per lb.....	@ 12
Fowls—Western, per lb.....	11 @ 12
Roosters, per lb.....	@ 8
Turkeys, per lb.....	@ 14
Ducks, per pair.....	@ 60
Geese, per pair.....	1.25 @ 1.75
Live Pigeons, per pair.....	@ 25

GAME.

Quail, per dozen.....	\$3.00@3.50
Woodcock, per pair.....	1.00@1.25
Grouse, per pair.....	2.50@3.00
Partridges, per pair.....	@ 2.25
English snipe, per dozen.....	1.75@2.00
Yellow snipe, per dozen.....	2.50@3.25
Golden plover, per dozen.....	2.50@3.00
Grass plover, per dozen.....	1.50@2.00
Rail, per dozen.....	50@1.00
Wild Ducks—Canvas backs, per pair.....	2.50@3.00
Red head, per pair.....	1.00@2.00
Black head, per pair.....	50@75
Mallard, per pair.....	75@1.00
Blue wing teal, per dozen.....	50@60
Green wing teal, per dozen.....	30@50
Ruddy, per dozen.....	75@1.00
Rabbits—Cotton tail, fresh, per pair.....	20@25
Jacks, per pair.....	50@60

FERTILIZER MARKETS.

BASIS, NEW YORK DELIVERY.

Bone meal, steamed, per ton.....	\$22.00 @ 23.00
Bone meal, raw, per ton.....	25.00 @ 26.50
Dried blood, West, high grade, fine.....	2.70 @ 2.75
Nitrate of soda—spot.....	@ 2.25
Bone black, diacid, per ton.....	15.00 @ 14.00
Bone black, diacid, sugar house del. New York.....	15.00 @ 30.00
Dried blood, N. Y., 12@13 per cent. ammonia.....	2.60 @ 2.65
Dried blood, West, high grade, fine.....	2.75 @ 2.80
Tankage, 9 and 20 p. c., f. o. b. Chicago.....	2.20 and 10
Tankage, 8 and 20 p. c., f. o. b. Chicago.....	18.00 @ 19.00
Tankage, 7 and 30 p. c., f. o. b. Chicago.....	15.00 @ 16.00
Tankage, 6 and 35 p. c., f. o. b. Chicago.....	15.00 @ 16.00
Garbage tankage, f. o. b. New York.....	8.00 @ 9.00
Fish scrap, dried, 11 p. c. ammonia and 15 p. c. bone phosphate.....	2.65 and 10
Wet, acidulated, 6 p. c. ammonia, per ton.....	2.40 and 10
Asontine, per unit, del. New York.....	2.60 @ 2.65
Sulphate ammonia gas, for shipment, per 100 lbs.....	2.15 @ 2.20
Sulphate ammonia gas, per 100 lbs. spot.....	2.10 @ 2.15
Sulphate ammonia bone, per 100 lbs.....	2.05 @ 2.10
So. Carolina phosphate rock, ground, per 2,000 lbs., f. o. b. Charleston.....	6.50 @ 7.75
So. Carolina phosphate rock, unground, f. o. b. Ashley River, per 2,400 lbs.....	8.50 @ 8.75
The same, dried.....	8.75 @ 4.00

POTASHES, ACCORDING TO QUANTITY.

Kainit, shipment, per 2,240 lbs.....	\$3.95 @ 9.50
Kainit, ex-store, in bulk.....	9.00 @ 10.00
Kieserit, future shipment.....	7.00 @ 7.25
Muriate potash, 80 p. c., ex-store.....	1.95 @ 2.00
Muriate potash, 80 p. c., future shipment.....	1.90 @ 2.00
Double manure salt (46@48 p. c., less than 2 1/2 p. c. chloride), to arrive per lb. basis 48 p. c.....	1.15@ 1.20
Sulphate potash, to arrive (basis 90 p. c.).....	2.15@ 2.27 1/2
Sylvinit, 34 to 36 p. c., per unit, S.F.....	.20 @ .40

LIVE STOCK REVIEWS

CHICAGO

(Special Letter to The National Provisioner from the Bowles Livestock Commission Co.)

Union Stock Yards, Chicago, Nov. 22.

CATTLE.—Total receipts of cattle last week were 71,814, showing a decrease of about 5,000 head. The falling off was due to the decrease in Westerns. Only 18,000 of these arrived, and from now on the Western range cattle will cut but little figure in the market, the season being practically at an end. The daily receipts of cattle this week were: Monday, 26,748; Tuesday, 4,954; Wednesday (estimated), 22,000. The market has ruled active and choice cattle are fully 10c. higher this week. Tops to-day reached \$6.60, the highest since last May, and 5c. higher than the high point of last week. The British market for American cattle has firmed up and the export demand is good, especially for prime cattle suitable for the English Xmas market. This demand is expected to continue good for the next few weeks both for the home market as well as for export. The quality of the offerings shows a decided improvement over recent arrivals. Choice yearling steers are selling at \$5.50@6.00. One lot averaging 1,143 lbs. brought \$6.25. A large number of steers averaging 1,450@1,600 lbs., of plain quality, sold at \$4.50@5.50; some big rough steers at \$4.50@4.75, averaging over 1,500 lbs. Export cattle averaging 1,150 @1,450 lbs. are selling largely at \$4.70@5.60. Ten cars of 1,240-lb. fed Texas steers sold at \$5.25. A large number of plain cattle averaging 1,100@1,250 lbs. went at \$3.75@4.50; inferior down to \$3.00. Butcher stock is active and strong. The demand is good for all classes of cattle at present.

HOGS.—Receipts of hogs for the first three days of this week, 102,890, compared with 105,071 for the same period last week, showing a small decrease of 2,180 hogs. Monday's official receipts were 36,890, which were fairly liberal, and yet the demand was sufficient to take the supply at a very small decline, top hogs that day selling at \$4.97½ against \$5.00 at the close of last week. Tuesday's receipts, 33,000, and prices were about 5c. lower, tops selling at \$4.92½ against \$4.97½ on Monday. To-day (Wednesday) receipts are estimated at 33,000, which was somewhat less than the trade expected. The market opened strong with Eastern shippers and speculators paying a little more money. The big packers, however, refused to follow the advance, and the result was the late market was about 5c. lower than the opening. A sale was made to-day at \$5.00 for some fancy butcher weights for Eastern shipment. Very few sales, however, were made above \$4.90, with the bulk of the hogs going at \$4.75@4.85. The quality of our receipts so far this week has been fairly good, showing a fair proportion of prime 220@250-lb. butchers. The heavy packing grades are also showing some improvement, being much better matured, consequently are selling better in proportion to lighter weights. We quote to-day's market as follows: Good to best medium and heavy weight shippers, \$4.85@5.00; good to best selected bacon grades, \$4.75@4.90; good to best heavy packers, \$4.70@4.80; mixed grades, \$4.70@4.85; pigs, \$4.50@4.80.

SHEEP.—Receipts of sheep and lambs have been quite light this week, particularly of the latter class, and the good to choice kinds have been scarce. Under these conditions the lamb market has been more favorable at an advance of 15@25c. The trade, however, is in a rather weak condition and cannot stand normal receipts under present conditions. Sheep have been in too liberal a supply and values 10@15c. lower. There don't seem to

be a very urgent demand for them at these figures. Several loads of prime lambs at \$7.50 but the bulk of the good to strictly choice at \$6.75@7.35, culls going at \$5.00@6.00, and medium lambs at from \$6.25@6.75. A few prime native ewes at \$5.00, but the fair to choice selling at \$4.00@4.75, culls at from \$2.00@3.00. A few fancy native wethers at \$5.25, yearlings at \$5.75@6.00, the latter price buying strictly prime handy weights 80@85 lbs. Those weighing 90 lbs. and up are discriminated against, and \$5.50 is a very fair price for that class. Western wethers of a very good class sold at \$4.85@5.00. Strictly prime not worth over \$5.25, ewes \$4.50@4.75. The feeder demand is stronger this week on good lambs, with the top at \$6.50, a fair kind at \$5.75@6.25, and common to good light at \$4@5. Feeding wethers don't sell very readily and a fair to good grade going at \$4.25@4.50; yearling wethers now at \$4.25@5.00. Breeding stock still in demand; good yearlings around \$5.00, and three to five-year-olds at \$4.25@4.75, as to quality. The immediate future would not warrant the free marketing of stock as the poultry season is close at hand.

KANSAS CITY

(Special Wire to The National Provisioner.)

Stock Yards, Kansas City, Nov. 24.

CATTLE.—Receipts this week, 59,500; last week, 68,100; same week last year, 58,000. General cattle market is 10@20c. higher than a week ago; fed steers leading the advance. Demand is strong and the gain in price so far has failed to draw in liberal supplies, showing that feeders are determined to stand out for higher prices. Stockers and feeders have probably seen the low time this season. Trade in butchers' stuff is active. Prices average 10c. higher; top fed steers bring \$5.15@5.40; bulk, \$4.25@4.90; grass cows, including canners, \$2@3.25; fed cows, around \$3.00; fed heifers and yearlings, upwards to \$5; bulls, \$2@3.25. Veals are a quarter higher, up to \$6.25. Quarantine fed steers, \$3.40@3.65; cows, \$2.35@2.75.

HOGS.—Receipts this week, 60,000; last week, 63,700; same week last year, 58,500. Small fluctuations have marked the hog trade this week. Pigs were strong sellers, and packers urgent buyers every day, apparently anxious to secure all they can at present prices. They still talk lower prices. The market was a shade lower to-day; top, \$4.82½; bulk of sales, \$4.70@4.80; light hogs and pigs, \$4.45@4.75.

SHEEP.—Receipts this week, 13,400; last week, 32,400; same week last year, 16,300. The mutton market has been on the quiet order, with an undertone of strength. Some fairly good stuff has been included and everything has found a ready outlet. Topy fed lambs, \$6.75@7; wethers and yearlings, \$5.20 @5.50; ewes, \$4.50@4.85. Some feeding stock has gone out at firm prices.

HIDES are a shade lower; green salted, 11 @12c.; bulls and stags, 8c.; glue, 6c.; deacons, 25@40c.; slunks, 10@20c.; sheep pelts, 25c.@\$1; dry flint butcher, 18@20c.

Packers' purchases this week:

	Cattle.	Hogs.	Sheep.
Armour	7,913	19,339	1,727
Amer. D. B. & P. Co.	477
Cudahy	5,908	11,378	1,447
Fowler	918	301
Morris	6,765	10,044	3,133
Ruddy	412
Schwarzschild	3,253	6,118	878
Swift	7,185	13,597	3,790

ST. JOSEPH

(Special Letter to The National Provisioner.)

So. St. Joseph, Mo., Nov. 21.

Receipts of cattle at the five markets for the two days of the week show a decrease of over 22,000, as compared with the corresponding days last week. The reduction in marketing has had a very beneficial effect on values,

which is manifest more on the good to choice qualities than on the common to medium under-fed steers. Styles of cattle selling at \$4.40 to \$5.25 to-day were selling 25c. to 40c. higher than the low point of last week, while the common to fair under-fed steers selling at \$4.25 and under were 10c. to 15c. higher. Range steers did not show any material change. Demand was good for all classes, and the volume of business was restricted by the limited supply. There has been considerable activity on the market for cows and heifers at prices 10c. to 15c. higher than the close of last week. Cannery and cutters of good quality have sold to somewhat better advantage than the good to choice cows selling at \$2.60 and upwards, but the demand for the latter grades has been good, and packers could have used many more than were available. Prime long-fed young heifers to-day sold up to \$5.25, but a pretty good class of cows that showed short feeding sold around \$2.75 to \$3.25, while canners and cutters generally sold at \$2.25 to \$2.50, with common kinds down around \$2.00. Demand was very good for all classes of bulls, and prices ruled fully steady, bulk of canning and bologna varieties, as well as the stockers and feeders selling at \$2.25 to \$2.50. Veal calves are strong to 25c. higher than the close of last week, common to choice being quotable at \$2.50 to \$6.25. The improvement noted in the beef steer trade has a beneficial effect on the trade in stock and feeding cattle, and the market shows a little more life and somewhat stronger prices than the close of last week.

The market on hogs continues to work downward slowly as receipts increase; all markets have had very liberal supplies this week, and the little gain made during the latter days of this week has all been lost. The range to-day was \$4.60 to \$4.82½, with the bulk selling at \$4.70 to \$4.80. The country seems to be full of hogs, and even under the depreciation in values receipts continue to enlarge, consequently there is not much prospect of permanent improvement in values for the near future. Demand here continues very strong, and although receipts are very heavy, packers could still use a great many more, as they are maintaining the market practically on Chicago basis, and are relatively higher than any competing point.

The supply of sheep this week has been rather light, but comparatively heavy at other points, and prices are ruling weak to a dime lower than at the close of last week; good to choice lambs are quotable at \$7.00 to \$7.25, and sheep are selling comparatively as well.

SLAUGHTER REPORTS

Special reports to The National Provisioner show the number of livestock slaughtered at the following centers for the week ending November 18:

CATTLE.

Chicago	43,663
Omaha	11,227
Kansas City	34,786
St. Joseph	15,921
Cudahy	496
Sioux City	2,818
Wichita	191
South St. Paul	3,656
Louisville	115
New York and Jersey City	10,070
Fort Worth	9,238
Detroit	1,234
Buffalo	4,525

HOGS.

Chicago	127,890
Omaha	31,343
Kansas City	72,024
St. Joseph	32,534
Cudahy	14,344
Sioux City	24,970
Ottumwa	16,804
Cedar Rapids	12,130
Wichita	4,538
Bloomington	2,771
South St. Paul	31,363
Indianapolis	3,531
Louisville	25,835
New York and Jersey City	49,839
Fort Worth	9,070
Detroit	8,500
Buffalo	52,000

SHEEP.

Chicago	68,444
Omaha	15,664
Kansas City	19,047
St. Joseph	8,375

THE GEO. F. TAYLOR CO.
Fuller's Earth and Bone Black
 For Filtering Purposes
 ALSO ALL FERTILIZER CHEMICALS
 AND MATERIALS.
 No. 80 Pine St., New York

Cudahy	477
Sioux City	130
Wichita	20
South St. Paul	6,894
Louisville	31,693
New York and Jersey City	81
Fort Worth	3,300
Detroit	48,800
Buffalo	

NEW YORK LIVESTOCK

WEEKLY RECEIPTS TO NOV. 20, 1905.

	Bees.	Cows.	Calves.	Sheep.	Hogs.
Jersey City	3,078	—	84	13,249	14,897
Sixtieth street	2,004	51	3,747	18,373	—
Fortieth street	—	—	—	—	22,292
Lehigh Valley	5,871	—	—	—	—
Weehawken	950	—	—	—	—
Scatterling	—	66	52	41	3,650
Totals	11,903	117	4,640	31,683	40,839
Totals last week	11,734	134	4,361	30,121	40,856

WEEKLY EXPORTS.

	Live Cattle.	Live Sheep.	Qrs. of Beef.
Schwartzschild & Sulsberger, Ss.	410	—	—
Victorian	—	—	—
Schwartzschild & Sulsberger, Ss.	390	—	1,773
Minnetonka	—	—	—
Schwartzschild & Sulsberger, Ss.	100	—	—
Idaho	—	—	—
Schwartzschild & Sulsberger, Ss.	—	—	812
Philadelphia	—	—	—
J. Shamburg & Co., Ss. Victorian	410	—	—
J. Shamburg & Co., Ss. Minnetonka	390	—	—
Morris Beef Co., Ss. Victorian	—	—	3,200
Morris Beef Co., Ss. Baltic	—	—	2,000
Swift Beef Co., Ss. Baltic	—	—	1,250
Armour & Co., Ss. Philadelphia	—	—	2,500
Armour & Co., Ss. Justin	100	—	—
C. Coughlin, Ss. Kansas City	150	—	—
Cudahy Packing Co., Ss. Campanis	—	—	1,500
Total exports	1,950	—	13,335
Total exports last week	1,997	10	15,150

MEAT AND STOCK EXPORTS

FOR WEEK ENDING NOV. 20, 1905.

	Live Cattle.	Live Sheep.	Qrs. of Beef.
Exports from New York	1,950	—	13,335
From Boston	4,178	—	12,140
From Baltimore	1,169	—	—
From Philadelphia	593	—	—
From Portland	891	144	—
From Montreal	3,507	50	—
Destination of exports:			
To London	2,844	—	8,925
To Liverpool	6,439	144	16,550
To Glasgow	1,449	—	—
To Bristol	150	—	—
To Hull	100	—	—
To Manchester	1,056	50	—
To Havre	150	—	—
To Para, Brazil	100	—	—
Totals, all ports	12,288	194	25,475
Totals, all ports last week	13,018	341	24,600

RECEIPTS AT CENTERS

SATURDAY, NOVEMBER 18, 1905.

	Cattle.	Hogs.	Sheep.
Chicago	500	13,000	2,000
Kansas City	2,000	7,000	2,000
Omaha	—	5,500	—

MONDAY, NOVEMBER 20, 1905.

Chicago	26,000	37,000	20,000
Kansas City	19,000	7,000	6,000
Omaha	5,500	3,500	14,000

TUESDAY, NOVEMBER 21, 1905.

Chicago	6,000	32,000	18,000
Kansas City	16,000	17,000	6,000
Omaha	3,500	6,500	16,000

WEDNESDAY, NOVEMBER 22, 1905.

Chicago	22,000	33,000	22,000
Kansas City	14,000	11,000	5,000
Omaha	4,500	7,000	2,000

THURSDAY, NOVEMBER 23, 1905.

Chicago	8,500	25,000	15,000
Kansas City	6,000	11,000	2,000
Omaha	2,500	6,000	7,000

FRIDAY, NOVEMBER 24, 1905.

Chicago	3,500	26,000	10,000
Kansas City	2,000	2,000	1,000
Omaha	2,000	3,000	1,000

SEE THE LIST OF
BARGAINS
ON PAGE 48

GENERAL MARKETS

LARD IN NEW YORK.

Western steam, \$7.40; city steam, \$7.12½; refined, Continent, tcs., \$7.80; do., South America, tcs., \$8.30; do., kegs, \$9.30; compounds, \$5.37½ @ 5.62½.

HOG MARKETS NOV. 24.

CHICAGO.—Receipts, 26,000; slow; generally 5c. lower; \$4.45 @ 4.90.

KANSAS CITY.—Receipts, 7,000; 5c. lower; \$4.65 @ 4.77½.

OMAHA.—Receipts, 3,000; weak; \$4.55 @ 4.67½.

INDIANAPOLIS.—Receipts, 10,000; lower; \$4.65 @ 5.05.

EAST BUFFALO.—Receipts, 5,100; weak; \$4.90 @ 5.15.

CLEVELAND.—Receipts, 40 cars; active; \$4.90 @ 4.95.

LIVERPOOL.

(By Cable to The National Provisioner.)

Liverpool, Nov. 24.—Beef, extra India mess, tierces, 77s. 6d.; pork, prime mess, Western, 75s.; shoulders, 33s. 6d.; hams, short, clear, 47s. 6d.; bacon, Cumberland cut, 44s. 6d.; do., short rib, 49s. 6d.; do., long clear, 30 @ 35 lbs., 47s. 6d.; do., 35 @ 40 lbs., 47s. 6d.; backs, 47s.; bellies, 48s. 6d. Tallow, 23s. 6d. Turpentine, 45s. Rosin, common, 10s. Lard, spot, prime Western, tcs., 37s.; do., American refined, 20-lb. pail, 38s. 6d. Cheese, white new, 58s. 6d.; do., colored, 60s. American steam lard (Hamburg), 50 kilos, 37½ marks. Tallow, Australian (London), 30s. Cottonseed oil, refined (Hull), 16s. 6d. Refined petroleum (London), 7½d.; linseed (London), 40s., nominal; linseed oil (London) 17s. 9d.

FRIDAY'S CLOSINGS.

Provisions.

The products markets hold fairly steady, and are without marked change in prices, with continued full distributions of cash stuff. The hog prices were about 5c. lower.

Cottonseed Oil.

The market has rather a tame look, and is quiet. New York prices for prime yellow: November, at 28½ @ 29¼c.; December at 28½ @ 29¼c.; January at 29 @ 29½c.; March at 29½ @ 29¾c.; May at 29¾ @ 30c. Sales, 300 bbls. December, 29c., and further offered at 29c.

Tallow.

Market not varied from the features in the weekly review of it. Weekly contract deliveries of New York city, hhds., were made at 4½c.

Oleo Stearine.

Steady in New York at 7½c. Sales for week, 250,000 pounds, 7½c.; Chicago at 7¼c.

CHEMICALS AND SOAP SUPPLIES.

New York, Nov. 23.—Quotations are as follows:

74 per cent. caustic soda, \$1.85 to \$1.90 for 60 per cent.

76 per cent. caustic soda, \$1.90 to 2c. for 60 per cent.

60 per cent. caustic soda, 2c. per lb.

98 per cent. powdered caustic soda, 3c. per lb.

58 per cent. pure alkali, 90c. to 1c. for 48 per cent.

48 per cent. carbonate soda ash, \$1.10 per 100 lbs.

Borax, 8c. per lb.

Talc, 1½c. per lb.

Palm oil in casks, 5½c. per lb., and in barrels, 6½c. per lb.

Green olive oil at 57 @ 58c. per gal.

Yellow olive oil, 65c. to 67c. per gal.

Green olive oil foots, 5c. to 5½c. per lb.

Ceylon coconut oil, 6½c. to 6¾c. per lb.

Cochin coconut oil, 8½c. per lb.

Cottonseed oil, 29c. to 30c. per gal.

Corn oil, 3¾c. per lb.

Rosin, K \$5.20, M \$5.35, N \$5.70, WG \$5.85, WW \$5.90 per 280 lbs.

BALTIMORE FERTILIZER MARKET.

(Special Letter to The National Provisioner from Thomas H. White & Co.)

Baltimore, Md., Nov. 23.—The market for ammoniates since last week has been quiet. The volume of business reported from any section is small. Quotations:

Unground tankage, 9 and 20, \$2.10 and 10 per unit f. o. b. Chicago; ground tankage, 11 and 15, \$2.25 and 10 per unit f. o. b. Chicago; ground concentrated tankage, \$2.20 per unit f. o. b. Chicago; ground blood, \$2.50 per unit f. o. b. Chicago; crushed tankage, 9 and 20 (futures), \$2.60 and 10, \$2.62½ and 10 c. a. f. basis Baltimore.

Nitrate of Soda.—The market is quiet, with small inquiry. Spot, \$2.20 per 100 lbs.; November-December, \$2.20 per 100 lbs.; January-March, 1906, \$2.22½ per 100 lbs.; April-May, 1906, \$2.20 per 100 lbs.; June-December, 1906, \$2.12½ per 100 lbs.

WESTERN FERTILIZER MARKET.

(Special Letter to The National Provisioner.)

Chicago, Nov. 23.—Blood for December shipment is now held at \$2.50. The prospects are for a firm to good market for the future months. Large sales have reduced packers' stocks of ammoniates, which are now light in the face of a good demand yet to be supplied. (For latest quotations see page 39.)

MOROCCO AS A COTTON OIL MARKET.

American cottonseed oil interests looking for a chance to widen their foreign market have had their attention called to Morocco as a field for exploitation of the American product. In a recent letter concerning investigations which he has been making on this point Consul Philip of Tangier says: "I am firmly convinced of the value of the market, hitherto neglected by our exporting houses, and there is little doubt of the commercial field here being much developed and enlarged in the near future. In view of this fact, and of the great activity displayed by the various countries of Europe in firmly establishing their products in Morocco, I am exceedingly desirous of seeing American participation in this trade as soon as possible."

"There is no reason why American houses should not at once attain a good sale of cottonseed oil in Morocco, which is at present introduced by English houses at enhanced prices. There are no American business houses established in Morocco. I could give the names of several European mercantile firms who could handle cottonseed oil and other commodities from the United States, yet I cannot accentuate too strongly the advantage of conducting American business through American agents in this country, where international business competition is strong."

"Regular freight steamers run between British, German, French and other ports and Tangier. I am using every endeavor to bring about the establishment of direct communication between the United States and Morocco, in the firm belief that as soon as an American freight line initiates regular service, say one visit to Tangier every month, or every two months, our exporting houses will be easily able to control the Moroccan market as regards certain products."



RETAIL SECTION



A MODERN RETAIL MARKET.

On Wednesday night, November 15th, the new retail market of Hugo Heyman, at No. 1018 Flatbush avenue, Brooklyn, N. Y., was thrown open to the public for inspection. As the opening had been quite extensively advertised and souvenirs promised, there was a large attendance, and the place was crowded from 7 till 10 P. M. This market is one of the finest and most complete in Greater New York, and as the means of handling the orders are along the line of the most modern methods, a description will be of interest.

The market occupies the first floor and basement of a building 31 feet wide by 100 feet long, with an "ell" extending to Regent Place, thus making it possible for all goods to be received and shipped from the rear, and preventing the annoyance and confusion attendant upon handling them through the front. What little woodwork shows in the store is of mahogany finish, rubbed down to a fine polish; all panels in fixtures are of opalite tile 7-16 of an inch thick; all counters have 1 1/4 inch white Italian marble tops, and a 4 inch marble rail supported on nickel plated brackets extends in front of all counters and show cases. The fish counter is one solid block of marble, 12 feet long by 3 feet wide, recessed to form gutters, and the corn-beef tray is the same, but only 8 feet long.

The showcases are all of three thicknesses of polished plate glass, and the top has marble border, in which the top glass sets flush with the top of the marble. The showcases are all cooled by means of spiral coils, through which the ammonia expands direct. They are fitted out with racks and shelves and are for practical use as well as being ornamental. The lighting scheme received considerable thought and attention, with the result that the whole store is evenly and brilliantly lighted, and there are no shadows to mar the effect. This is somewhat difficult to do, as there are so many different objects interposed between the ceiling and floor, in the way of package carriers, scales, fly fans, gas fixtures, etc.

In designing this market the first thing taken into consideration was the method to be followed in handling the business. It was decided to use the re-weighing system; this, of course, necessitated the use of autographic registers, and a package-carrying system with its necessary terminal station and wrapping counter. A purchaser now makes his selection and orders the goods, which are weighed by the salesman, who writes a duplicate numbered ticket on the autographic register, gives the original to the customer, who takes it to the cashier, pays the bill, gets the bill back with "paid" stamped on it, and then proceeds to the delivery counter, where his package is already waiting and is identified by means of the duplicate numbers. "C. O. D." delivery and "charge" orders are all handled through the same sys-

tem, and as all bills, no matter what terms are on them, have to go through the cash register, it is possible to see at a glance just how many and what the amount of sales are at any time.

As no market of this kind would be considered up-to-date without a refrigerating machine, a brief description of this one is in order. The refrigerating and power plant is located in the basement, and includes a 22 H. P. horizontal Fairbank gas engine, which drives a shaft resting on floor stands; the engine is fitted with a friction clutch to enable starting and stopping easily. It also has a self-starter arrangement, whereby the engine compresses its own air supply.

In addition to the compressor, the engine drives a meat chopper and grind stone; and provision is made for a dynamo, should Mr. Heyman at any time decide to generate his own current for lighting the store. This necessitated a particular method of wiring, so as to use either the alternating or direct current system. The refrigerating machine is a 10-ton horizontal, double-acting Barber compressor driven from the main shaft. The condenser is of the double pipe type, 20 feet long and 12 pipes high.

There are in the store four plate-glass showcases, all cooled by direct expansion; three of them are about 6 ft. by 3 ft. by 3 ft., and one 40 ft. by 3 ft. by 3 ft. These coils are all fed from one expansion valve, each coil is by-passed in the basement, and the return of these coils lead into the coils of the pickle-room, so as to prevent freezing back on to the compressor.

The main meat box on the first floor is 22 ft. by 20 ft. by 13 ft. high, with usual bunker, containing coils and brine tanks to maintain a temperature of 35 degrees. The basement has one freezer, 20 ft. by 8 ft. by 9 ft., for a 20 degree temperature; a meat room, 20 ft. by 8 ft. by 9 ft., for a 35 degree temperature; and one corn beef or pickle-room 20 ft. by 20 ft. by 9 ft., for a temperature of 40 degrees F. The freezer is equipped with brine tanks and a set of sharp freezer coils, so arranged that goods can be laid on the coils direct. The different rooms are all by-passed on the return lines, so as to operate on a single expansion valve, and are also fitted with independent expansion valves, so any room can be cut out.

The entire equipment of this store was installed after the plans furnished and under the supervision of the Fairbanks Company, through Mr. M. R. Carpenter, who has charge of their refrigerating department. The refrigerating and power plant was installed by them under a separate contract. The fixtures and insulation of refrigerators was done under contract with Thos. Farrell, No. 626 10th avenue, New York. Mr. Heyman will take pleasure in showing the plant to any one interested. He is very proud of his new meat palace.

AGAINST UNDRAWN POULTRY.

With the approach of another legislative session the medical faddists who profess to see danger in pretty nearly every article of food put on the market, are beginning to renew their agitation against undrawn poultry. They had a bill introduced in the New York Legislature last winter embodying their views, but it was defeated, thanks to the efforts of the energetic poultry men of the city and State, and the good sense of the majority of the legislators. They intend to have this bill reintroduced at the coming session, and their associations have been passing resolutions and drawing up memorials setting forth the necessity of such a law to prevent the wholesale slaughter of poultry eaters through ptomaine poisoning.

Poultry eaters, poultry dealers and poultry raisers will be found united in opposition to the measure. Prohibition of the sale of undrawn poultry would bring about a situation similar to that which would exist should the sale of refrigerated meat be declared illegal. In the latter case 99 out of every 100 residents of a city would have to go without meat. The same would be pretty nearly true if undrawn poultry were kept out of the markets. Poultry raisers would find their industry suddenly unprofitable, dealers would be ruined and the public would have to go without its fowl.

Poultry men declare that the faddists cannot prove undrawn poultry dangerous to health. They assert that the contrary would be true; that under existing commercial conditions drawn poultry would be even a greater menace to health, were traffic restricted to that class. Most of them insist that they never heard of a case of ptomaine poisoning due to undrawn fowl. In an interview this week one New York dealer, speaking of the commercial side of the question, said:

"The absurdity of any such legislation is apparent to anyone who knows anything about the poultry business. We dealers get our profits on a percentage basis. If it were practicable to sell drawn poultry it would command a higher price, which would mean an increase in our profits. Is it likely that we should oppose any measure which would put money in our pockets? The claim that poultry that has been kept for any length of time without having the entrails drawn is dangerous to health is equally absurd. I have been in the business for thirty-one years and have sold as much, if not more, dressed poultry than any other man, but I have yet to hear of the first case of ptomaine poisoning caused by eating poultry. A bill the character of last year's measure would be a blow at the interests of the farmers, and as soon as they begin to appreciate that fact they will be found in strong opposition."

Openings for experts in all departments of the meat industry. Watch page 48.

LOCAL AND PERSONAL.

T. Rhodes has opened a new butcher shop at Chesley, Ida.

M. A. Macomber will open a new meat market at Perry, N. Y.

Mitchell Govro will open a new meat market at Russells, Mass.

G. A. Reeder has engaged in the meat business at Hatton, Wash.

Tony Smart has opened a meat market at Great Barrington, Mass.

E. C. Travis has sold his meat market at Cleo, Okla., to J. L. Heck.

A new market has been started at Niagara Falls, N. Y., by F. W. Fox.

A. B. Schneider has opened a new meat market at Hutchinson, Kan.

Ambrose A. Cassidy has opened a meat market at Port Huron, Mich.

A new meat market will be opened at Carleton, Me., by Allen C. Michael.

Peter Anderson has opened a new meat market at Minneapolis, Minn.

Doherty & Griffin have opened a new butcher shop at Alliance, Neb.

H. J. Wolfe has sold his meat business at Oakley, Kan., to Geo. Compton.

A. Turner has sold his meat market at Osmond, Neb., to E. L. Peterson.

The meat market of G. W. Smith at West, Tex., has been damaged by fire.

J. I. Carr has purchased the butcher shop of C. C. Knight at Spangle, Wash.

J. E. MacNute has sold his meat market at Blue Springs, Neb., to A. L. Roper.

J. H. Lee has sold his meat business at St. Paul, Neb., to C. W. Robinson & Son.

F. Klass has purchased the meat market of Angel & Morris at Maryville, Mo.

The meat market of Miller & Kluge at Gonzales, Tex., has been damaged by fire.

In a recent fire in Whitman, Neb., the meat market of P. B. Phipps was destroyed.

Myers & Son have sold their meat market at Pawnee City, Neb., to C. M. Nicholas.

A new meat and grocery store has been opened at Lewiston, Me., by E. Pelletier.

J. F. Butterfield has sold his grocery and meat business at Milo, Me., to Mr. Osgood.

Joseph Huffsmith has sold his meat market at Factoryville, Pa., to John Pallman.

L. A. Beaudrault has sold his meat market at Putnam, Conn., to Beausoliel Brothers.

I. H. Ford has purchased the meat market of Geo. H. Parks & Son at Albuquerque, N. M.

Edwin Jarl has sold his meat and grocery business at Denver, Col., to B. H. McChesney.

S. G. Pennoyer has sold his meat business at Alpine, Cal., to F. B. Walker & Son.

Harfbauer & Manning have purchased the meat market of Dickman Bros. at Westcliffe, Col.

Williams Adams and William Mills have opened a meat market at Burritts Rapids, Can.

James J. Mayer has opened a provision store at 442 Fourth street, San Francisco, Cal.

Drake & McFadden have succeeded to the meat business of W. W. Drake at Natoma, Kan.

C. L. Arndt has sold his meat and grocery business at Iola, Kan., to Canatsey & Remington.

G. M. Cosgriff & Son have reopened their meat market and grocery store at Burlington, Vt.

Powelson & Mack have been succeeded in the meat business at Onaga, Kan., by Mack & Witham.

Fred Labell has sold his interest in the Rigby Meat Company at Rigby, Ida., to Harry Morgan.

Richardson & Sare have succeeded to the meat and grocery business of R. P. Sare at Erie, Kan.

C. F. A. Lauenstein has purchased the meat and grocery business of C. A. Sarius at St. Louis, Mo.

Patterson & Yarbo have purchased the meat and grocery business of W. E. Ezell at Piedmont, Kan.

F. P. Carter & Company have sold their meat market at Mexico, Mo., to D. C. Owen & Company.

C. C. Cole has purchased the meat market and grocery store of Dysart & Taylor at Fillmore, Mo.

Nelson & Wright have succeeded to the meat business of Blayne & Nelson at Oregon City, Ore.

Elmer and Fred W. Johnson have purchased the meat market of Preston Campbell at Canastota, N. Y.

Louis and John Russi have purchased the Granite Meat Market at Folsom, Cal., from Yoerk & Gerber.

Sinclair & Letz have been succeeded in the meat and grocery business at Greenfield, Ia., by Henry Letts.

Geo. W. Krumm has purchased a half interest in the meat business of Henry T. Thompson at Ault, Col.

Hemenway & Schaubel have purchased the business of the city meat market at Weiser, Ida., from S. H. Lee.

The American Meat Company, Limited, of Lewiston, Ida., has been incorporated with a capital stock of \$10,000.

F. Fuernstahl has purchased from Frank Friese the meat market at 1813 Buchanan street, San Francisco, Cal.

Fire destroyed the store and stock of the People's Grocery and Provision Company at McHenry, Miss., last week.

T. J. Murphy, a provision dealer of Natick, Mass., has been declared a bankrupt; liabilities \$1,693, with no assets.

Menzo Tobey will open a new meat market at Delhi, N. Y., having disposed of his meat business at Meridale, N. Y.

Samuel J. Bee, a butcher of Sonora, Cal., has filed a petition in insolvency. His liabilities are \$1,500, and assets \$699.

Charles O. McCarty has purchased the interest of Reuben R. Zollers in the meat business of McCarty & Zollers, South Bend, Ind.

John P. Curley, the provision dealer of Lowell, Mass., will open a large and up-to-date market at the corner of John and Lee streets.

The meat market of J. C. Patrick, at Darlington, S. C., was destroyed by fire on November 15. Loss on building and contents, \$1,200; no insurance.

The Will Provision Company of St. Louis, Mo., has been incorporated with a capital stock of \$2,000, by Charles L. Will, Oswald Matt and Josepha Will.

Willis J. Towne and Robert J. Shinn, owners of the Washington Meat Market at Santa Cruz, Cal., have dissolved partnership, Mr. Towne continuing the business.

HOME MADE SAUSAGE.

That the sausage industry has grown into immense proportions is due to several conditions. First, sausage is becoming more and more a favorite dish because of the appetizing and wholesome manner in which it is made. Second, nice, clean, home-made sausages increase a butcher's trade wonderfully. Third, successful sausage making requires modern machines to make it fast and good and at a reasonable cost. Fourth, machines are now made in all sizes; for the largest packers and the smallest butchers.

No machines have more largely contributed to build up the sausage industry than the Boss Cutters and Boss Mixers, manufactured by the Cincinnati Butchers' Supply Company. They manufacture six sizes of cutters, capacity from 20 to 250 lbs., and seven sizes of mixers, capacity from 100 to 1,500 lbs. Besides these machines they also manufacture hand power attachments for Enterprise cutters. Their Boss triple speed attachments for No. 22 and No. 32 Enterprise cutter are a wonder. Meat can be cut slow or fast, coarse or fine, and as easily as is possible by hand.

Other convenient machines are their Boss power attachments for No. 32 and No. 42 Enterprise cutters, to which a Boss mixer or any other machine can be attached without the additional cost for counter-shaft. These practical devices meet with great favor and their ready sale prove how well they are liked by the butcher and small sausage makers. On another page of this issue these machines are illustrated in the advertisement of the Cincinnati Butchers' Supply Company and those of our readers who are in need of any such machines are advised to take up correspondence with the Cincinnati Butchers' Supply Company, Cincinnati, O. These machines are also sold by all dealers.

BLACK PAINT FOR SIGN-BOARDS.

A good way to acquaint the public with the prices of the various kinds of meat cuts, sausages, etc., is the sign-board, placed either outside of the shop or within. It is of frequent occurrence that the black paint on the board soon gives out, rendering the writing illegible and the appearance of the board unsightly. A good paint which must be able to withstand the action of the rubbing chalk, as well as the water used in cleaning the board, is desirable. Some paints ready made for this purpose are found on the market which give fairly satisfactory results, although many of them render the board quite glossy, which should not be the case. The following gives a good article for the purpose and can be made by any butcher's assistant without expense or trouble.

Place $\frac{1}{4}$ pound of lamp black on a flat piece of tin or iron on a fire till it becomes red, take it off and leave it until sufficiently cool, when it must be crushed with the blade of a knife on a flat board quite fine; then get $\frac{1}{2}$ pint of spirits of turpentine, mix both together and apply the mixture with a size brush. If the board is new, it would be well to give it one or two coats of lampblack—not burned, but mixed with boiled oil, adding $\frac{1}{2}$ pound of patent driers. After the board is thoroughly dry, apply the burnt lampblack and turpentine. The preparation must be laid on quickly.

Stallman Hydraulic Sausage Stuffer

The Very Thing Sausage Makers have been wanting

Simple in design and construction—Absolutely safe, durable and more efficient even than the steam stuffer.

A Few of the many Users:

A. H. March Packing Co., Bridgeport, Pa.; Geo. Kern, New York; M. Zimmermann Co., New York; Samuel Busch, Jersey City; J. J. Fellin Co., Philadelphia; C. Hohman & Son, Baltimore; L. Sillmeyer, Baltimore; E. H. Moulton, Haverhill, Mass.; H. L. Handy Co., Springfield, Mass.; Geo. Baepfle, Worcester, Mass.



Absolutely THE Best Sausage Stuffer in the World.

Write to-day for Price and Particulars.

R. T. RANDALL & CO.,

Manufacturers and Dealers in

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NO LEAKS

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S. OPPENHEIMER & CO.,

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Importers and Cleaners of

SAUSAGE CASINGS

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BUTCHERS AND PACKERS SUPPLIES

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HERBS & SEEDS

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SAUSAGE MAKERS

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Decorticated White Pepper
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Regular Issue of Price Current.
Is Your Name on Our List?

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Fertilizer Dryers.

Rendering Tanks and Kettles.

BONE MILLS.

THE C. O. BARTLETT & SNOW CO.
CLEVELAND, OHIO.

Watch page 48 for business opportunities

Directory of Representative Manufacturers

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Cleaners and Importers of
Sausage Casings
 BUTCHERS' TOOLS, FIXTURES and MACHINERY
 Office and Salesroom:
 221 SO. EUTAW STREET, BALTIMORE, MD.

BERTH LEVI & CO.

Sausage Casings
 Importers and Exporters
 CHICAGO, ILL. NEW YORK, N. Y.
 330 Washington St. 52 Pearl St.

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Manufacturer of all kinds of
BOLOGNAS, SAUSAGES, ETC.
 Specialties: German METTWURST, Braunschweiger, Liverwurst, Pomeranian Bloodwurst.
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 Bet. 46th and 47th Sts. NEW YORK

THE NORTH AMERICAN PROVISION CO.

CITY OFFICE: 6 SHERMAN ST. (OPPOSITE BOARD OF TRADE)
 WAREHOUSES: UNION STOCK YARDS, CHICAGO
COLD STORAGE AND GENERAL WAREHOUSEMEN
 Storage rates on application.
 Cash buyers of Pork Products, etc.
 Liberal advances made on consignments. Storage solicited.

C. H. REED'S SONS

Wholesale and Retail
Provision Dealers
 185 and 187 First Ave.,
 Between 11th and 12th Streets, NEW YORK
 Telephone, 1873-18th St.

JOHN BOWER & Co.

S. W. Cor. 24th & BROWN STREETS

**HONEY-CURE HAMS, BREAKFAST
 BACON, BEEF TONGUES AND ALL PROVISIONS**

PHILADELPHIA, PA.

CHARLES ROESCH & SONS CO.

**SLAUGHTERERS
 AND PACKERS**

"Standard" Brand Hams and Bacon

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REGAL MANUFACTURING COMPANY (INCORPORATED)

Dealers in
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 Country Orders Solicited. TELEPHONE-1787 and 1738 38th St. Office and Factory:
 652 to 658 West 39th Street, Borough of Manhattan, New York City

Phones: 7471, 7472, 7473 Cortlandt

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Commission Merchant and Dealer in Foreign and Domestic
POULTRY AND GAME
 267-269 WASHINGTON STREET
 Near Warren Street NEW YORK
 Branch: WEST WASHINGTON MARKET
 Phone: 442 Chelsea 37 to 47 Lawton Avenue

ADAMS BROTHERS CO., General Offices: West Washington Market, New York City.

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BEEF, MUTTON, VEAL, PORK LOINS, RECEIVERS OF DRESSED POULTRY.



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 Highest Award, "GRAND PRIZE," St. Louis, 1904

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 BRANCHES: 67 COMMERCIAL STREET, BOSTON, 620 W. 36TH STREET, NEW YORK, 44TH STREET and CENTER AVENUE, UNION STOCK YARDS, ILL.

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We Produce "The Best in the West"

Packinghouses at Nebraska City, Neb.

General Offices: RAILWAY EXCHANGE,

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CURED BY **MILLER & HART (INC.)**
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Buyers of Green Meats Sellers of Cured Products

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Branches: Chasevort Bank, New York; The G. H. Hammond Co., Chicago;
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Commission Agents,
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CORRESPONDENCE SOLICITED
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THE CELEBRATED VIENNA
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AND ALL KINDS OF

FRESH MEATS & POULTRY,

MANUFACTURERS AND DEALERS IN ALL KINDS OF

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Country orders solicited.

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Wholesale Butchers

HOME DRESSED BEEF, MUTTON,
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WM. SCHLICHER | Foot of Perrine St.
PETER SCHLICHER | TRENTON, N. J.

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MIXED CARS A SPECIALTY

QUOTATIONS FURNISHED ON APPLICATION

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Tel. Call, 617-791h

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Manufacturers of All Kinds of

Fine Provisions, Bolognas and Sausages

1427 Second Avenue, New York

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ADVERTISEMENTS

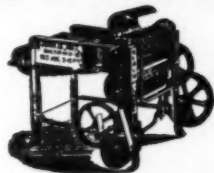
PAGE 48

H. SCHEIDEBERG,

(Established 1870)

Manufacturer and Dealer in all kinds of
SAUSAGE CASINGS,
and direct Importer of
ENGLISH SHEEP CASINGS
Best Sausage Casing of Every Description
212 18th St., JERSEY CITY

CHAMPION FAT CUTTING MACHINE.



Cuts 100 pounds per minute uniformly. Reduces
crackling cake 6 per cent. Made only by
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Russian Sheep Casings.

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JOSEPH STERN & SON

Successors to Stern & Metzger

WHOLESALE BUTCHERS

Abattoirs, 616, 618 & 620 W. 40th St.
Salesrooms, 617, 619 & 621 W. 39th St., N. Y.

BEST QUALITY OF CITY DRESSED
REFRIGERATED BEEF AL-
WAYS ON HAND

"NEW-SKIN"

Heals Cuts, Abrasions, Hang-Nails, Chapped
and Split Lips or Fingers, Burns, Blisters,
etc. Instantly Relieves Chilblains,
Frosted Ears, Stings of Insects,
Chafed or Blistered Feet,
Callous Spots, etc., etc.

A coating on the sensitive parts will pro-
tect the feet from being chafed or blistered
by new or heavy shoes.
Applied with a brush and immediately dries,
forming a tough, transparent, colorless water-
proof coating.

BUTCHERS

are particularly liable to small cuts. "NEW-
SKIN" will heal these injuries, will not wash
off, and after it is applied the injury is for-
gotten, as "NEW-SKIN" makes a temporary
new skin until the broken skin is healed
under it.

"Paint it with 'New-Skin' and forget it" is literally true



LIQUID COURT PLASTER

"NEW-SKIN"

is better and safer than dirty rags, and not
distasteful to the customer.

CAUTION: WE GUARANTEE our claims for
"NEW-SKIN." No one guarantees substitutes
or imitations trading on our reputation, and
the guarantee of an imitator would be worth-
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ALWAYS INSIST ON GETTING "NEW-SKIN"

Sample size, 10c. Family size (like illus-
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AT THE DRUGGISTS, or we will mail a
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Advertisements under this head \$1.00 per inch per insertion

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Established mercantile, manufacturing or milling business. Will pay cash. Give full particulars and lowest cash price. Address Box 529, care The National Provisioner, New York.

WANTED

Salesman for packinghouse machinery who has had practical packinghouse experience. Address, stating experience, ability, etc., Box 615, care The National Provisioner, New York.

FOR SALE

Meat market in New York State, paying business, fine equipment. Sell to close estate. Address Box 610, care The National Provisioner, New York.

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Draftsman, well acquainted with packinghouse details. Capable of laying out and handling plans. Address, with full particulars, giving experience, "Contractor," care The National Provisioner, 17 Exchange avenue, U. S. Yards, Chicago, Ill.

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FIRST CLASS EGG AND BUTTER SALESMAN for the jobbing trade. One familiar with the trade in the Bronx and Brooklyn preferred. Liberal arrangements will be made with the proper party. Address Conron Bros. Co., 10th avenue and 13th street, New York.

FOR SALE

New and second-hand dryers, different sizes, suitable for drying fertilizers or other commodities. Good order. Sold for want of use. Subject to inspection. Will be sold cheap. Geo. M. Sterne & Son, 215 Postal Telegraph Building, Chicago, Ill.

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Position as superintendent by a man with 25 years' experience in the manufacture of bone and hide glues. Address Box No. 609, care The National Provisioner, New York.

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Gasoline engines, one 25 h. p., one 50 h. p. Suitable for sausage or detached machines. Address Box 599, care The National Provisioner, New York.

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Fat Cutter. Quick and accurate. In good repair. Address Box 613, care The National Provisioner, New York.

WANTED

Foreman for small-stock killing department. Must be sober and experienced. References. Address Box 611, care The National Provisioner, New York.

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Walburn-Swenson double effect tank water evaporator, capacity 10,000 gallons in 24 hours. In good order and complete. Address "Evaporator," care The National Provisioner, 17 Exchange ave., Chicago.

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Established meat market in New York State; complete with horses, wagons, etc. Established trade. Good reasons for selling. Address Box 614, care The National Provisioner, New York.

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Expert in glue making from animal products. Only first-class men, with references, need apply. Address Box 612, care The National Provisioner, New York.

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Two hydraulic tankage presses, 13-inch cylinder. In good order and complete. Address "Machinery," care The National Provisioner, 17 Exchange ave., Chicago.

FOR SALE

Twenty-five ton compression refrigerating machine; well-known make; complete. Address Box 616, care The National Provisioner, New York.

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Refrigerating machinery wanted! A splendid field for American enterprise. Try an advertisement in the "Australian Trading World."

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The Standard Champagne Quality

Vintage champagnes are not supplied in unlimited quantities. The house of POMMERY guarantees its vintages.

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The GREATEST quantity ever imported by any brand in the history of the Champagne trade

A five Dollar Safe

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WM hold a large number of Deeds, Mortgages, Insurance Policies, Bonds, Stocks and other valuable papers.

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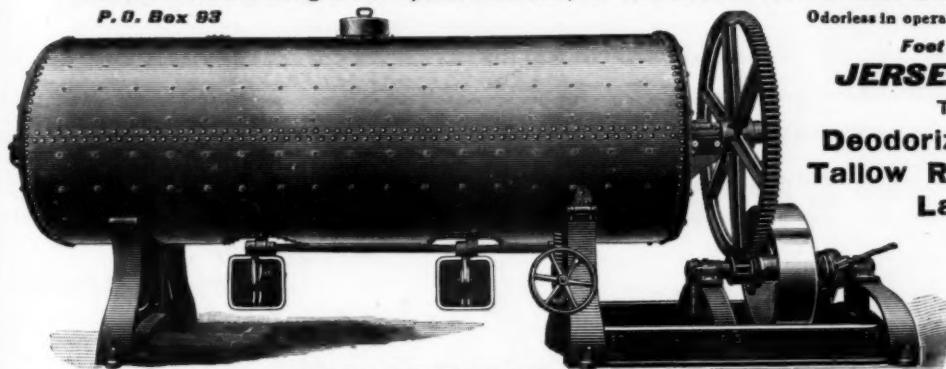
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**Deodorizing Condenser
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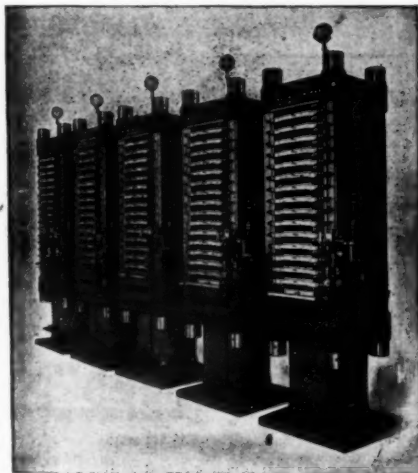
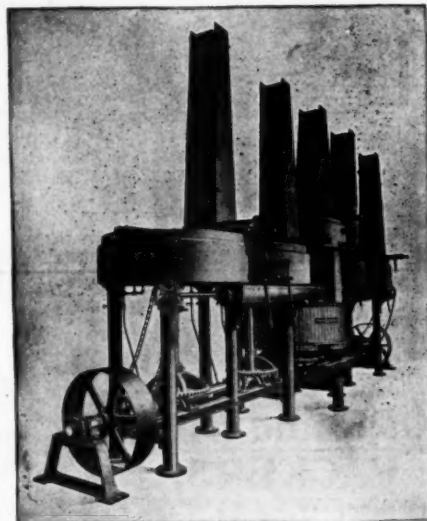
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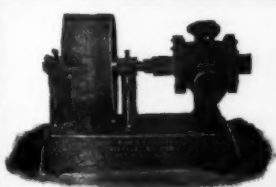
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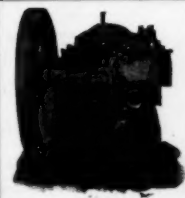
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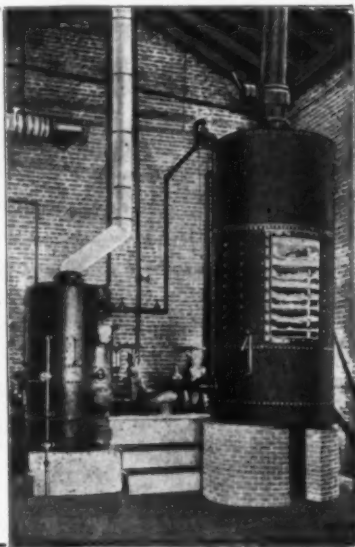
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FOR PUMPING YOUR LARD, GREASE, COTTONSEED OIL, SOAP LYE, ETC.

WRITE FOR CATALOGUE

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Deposit Stopped by Stilwell Heater at plant of
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The LIFE of the BOILER is prolonged by the use of a STILWELL FEED-WATER HEATER

not by feeding the boiler with chemicals.
It prevents cold water from entering and straining the boiler;
It prevents oil from entering the boiler;
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It has been used with profit by hundreds of well-known power plant owners in this country and we would like to send you their names and also our BOOK "N. P." on Boiler Economy.

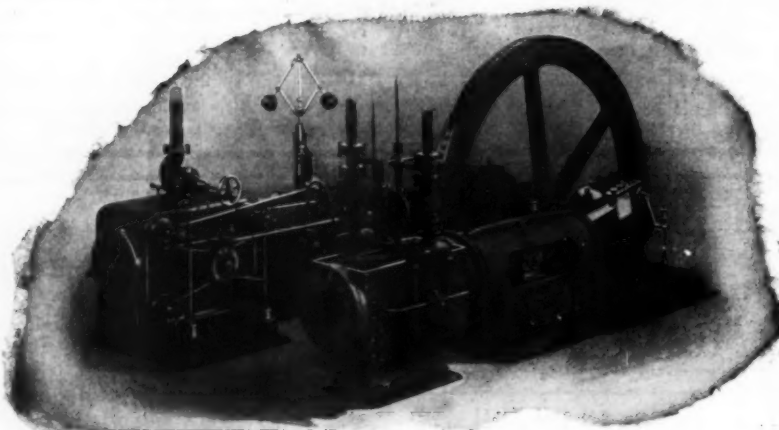
THE PLATT IRON WORKS CO.

Successors to the STILWELL-BIERCE & SMITH-VAILE COMPANY

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Builders of PUMPING MACHINERY, WATER WHEELS, AIR COMPRESSORS
and POWER PLANT APPARATUS

DE LA VERGNE MACHINE CO.



STANDARD HORIZONTAL MACHINE.

REFRIGERATING AND
ICE MAKING MACHINERY
5 TO 500 TONS

KOERTING GAS ENGINES
65 TO 3000 H.P.

HORNSBY-AKROYD OIL ENGINES
1½ TO 125 H.P.

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CHICAGO, ILL.	- Security Building
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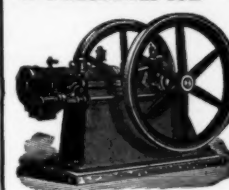
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